THE IMPACT OF SELECTED SCHOOL FACTORS ON THE TEST PERFORMANCE
OF AFRICAN-AMERICAN ECONOMICALLY DISADVANTAGED
ELEMENTARY STUDENTS

Wynette O. Griffin, B.A., M.Ed.

Dissertation Prepared for the Degree of
DOCTOR OF EDUCATION

UNIVERSITY OF NORTH TEXAS

May 2006

APPROVED:

Jane B. Huffman, Major Professor
Mary M. Harris, Minor Professor and Interim
Chair of the Department of Teacher
Education and Administration
Linda Stromberg, Committee Member
Johnetta Hudson, Departmental Program
Coordinator
M. Jean Keller, Dean of the College of Education
Sandra L. Terrell, Dean of the Robert B. Toulouse
School of Graduate Studies

In order for America to retain its superior position in a global economy it is imperative that all students receive educational opportunities that will prepare them for the future. Currently, African-American economically disadvantaged students in the United States perform lower on standardized tests than their grade and age-level peers. Educators must find ways to improve the performance of students in this group in order to maximize future opportunities. Through a mixed-methodology approach, the current study finds three school factors that may positively impact the performance of African-American economically disadvantaged students: high expectations, student-teacher relationships and teacher effectiveness. Quantitative and qualitative analysis provides perspectives from principals primarily from a large urban school district on the impact of these factors on student performance.
ACKNOWLEDGEMENTS

My sincere thanks to Dr. Jane Huffman, my major professor, for her steady encouragement, timely and extremely helpful feedback throughout this project, and her patience with my impatience. I have been blessed to have been able to work with you, and to have benefited from your guidance, insight, and support. As I complete this project still enthusiastic about the subject and excited the opportunities for application of the insights I have gained, I appreciate the many conversations we had early in the process that forced me to critically evaluate what I really wanted to know. To Dr. Mary Harris, I appreciate the high standards of teaching you exemplify for your students, as well as the encouragement you provided during this and other projects. I also sincerely appreciate the insights, questions, and encouragement from Dr. Linda Stromberg, who also continually urged public presentation of the learning that I was experiencing.

My gratitude is extended to the principals who participated in both the survey and in the interviews that were held. Because of the promise to preserve anonymity, they will not be named, but I am most appreciative to each one of them for the time and insight they shared.

This project was made possible in large part because of the support of colleagues and staff in the Grapevine-Colleyville Independent School District. In particular, Dr. Kay Waggoner, Superintendent, and Patti Davis, Director of Elementary Education, were both instrumental in providing feedback and support. Dr. Karen Vance, Director of Testing and Assessment, was an invaluable source of support and assistance in completing the statistical analysis. I am forever indebted to her for the many hours of advice and feedback she provided. Most important, however, was the staff at Glenhope Elementary school, who provided moral and tangible support through the past year so that I could complete my research. I could not have managed the
demands of completing this project as well as the needs of our school with out the ever-present and never flagging support of Anne Ricci, Molly Hasenpflug and Kathy Beaufait.

Finally, my family has tolerated long stretches of take-out meals, grumpiness upon interruption, and other absent-minded behaviors that have impacted the quality of our family life for the past year. To my mom and dad, Wayne and Eva Maye Oeffler, who started me on the journey of learning at an early age and always created and nurtured an environment that helped me make learning a priority, thank you. For my daughter, Liz, who has encouraged me during times of despair and also put up with “Mom’s in the study-don’t bother her” more times than could be counted, I love and appreciate you for the wonderful young woman you have become. I hope to provide the same kind of support as you continue your studies. And finally, to my beloved husband, Jim, who throughout our married life has always provided the support and encouragement for any endeavor I wanted to undertake, thank you for all you have done and endured to make this dream a reality.
# TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS ......................................................................................................................... ii

LIST OF TABLES ..................................................................................................................................... vii

Chapters

1. THE RESEARCH PROBLEM ........................................................................................................... 1
   Introduction ....................................................................................................................................... 1
   Statement of the Problem ................................................................................................................. 11
   Research Questions ......................................................................................................................... 11
   Significance of the Study ................................................................................................................... 12
   Rationale .......................................................................................................................................... 13
   Methodology ..................................................................................................................................... 15
   Limitations ...................................................................................................................................... 16
   Delimitations ................................................................................................................................... 17
   Assumptions .................................................................................................................................... 19
   Operational Definitions .................................................................................................................... 19
   Organization of Dissertation ............................................................................................................ 21

2. REVIEW OF THE LITERATURE .................................................................................................... 23
   Introduction ....................................................................................................................................... 23
   Effective Schools .............................................................................................................................. 27
   Student-Teacher Relationships ......................................................................................................... 29
      Observations of African American Educators ............................................................................... 31
      Differing Opinions of the Impact of Relationships ..................................................................... 32
      Cultural and Stylistic Differences .................................................................................................. 36
      Strong Relationships Benefit Schools ......................................................................................... 40
   Expectations and Academic Focus .................................................................................................... 41
      Culturally Relevant Teaching Begins with High Expectations ...................................................... 42
      The Impact of Expectations ............................................................................................................ 43
   Principal Leadership ......................................................................................................................... 48
      Indirect Effects ............................................................................................................................... 50
Summary of the Results .............................................................................................................. 132
Discussion of the Results .......................................................................................................... 133
Interpretation of the Findings.................................................................................................... 134
  Student Teacher Relationships ............................................................................................... 136
  High Expectations .................................................................................................................. 139
  Teacher Effectiveness ............................................................................................................ 141
  Principal Leadership .............................................................................................................. 144
  Use of Data ............................................................................................................................ 146
Recommendations .................................................................................................................. 147
Suggestions for Additional Research ....................................................................................... 147
APPENDIX A: LETTER REQUESTING PARTICIPATION IN PILOT SURVEY ...................... 155
APPENDIX B: RESEARCH PROPOSAL FORM FOR SCHOOL DISTRICT ......................... 157
APPENDIX C: LETTER REQUESTING SURVEY PARTICIPATION .................................... 164
APPENDIX D: SURVEY QUESTIONS ..................................................................................... 166
APPENDIX E: STRUCTURED INTERVIEW QUESTIONS ..................................................... 169
APPENDIX F: CATEGORIES FOR QUALITATIVE INTERVIEWS ......................................... 172
APPENDIX G: FACTOR 1 SURVEY QUESTIONS BY CATEGORY ....................................... 174
REFERENCES ......................................................................................................................... 177
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Spring 2004 State Average TAKS Passing Rates for Elementary Students</td>
<td>14</td>
</tr>
<tr>
<td>1.2</td>
<td>Spring 2005 State Average TAKS Passing Rates for Elementary Students</td>
<td>14</td>
</tr>
<tr>
<td>3.1</td>
<td>Spring 2004 State Average TAKS Passing Rates for Fifth Grade Students</td>
<td>77</td>
</tr>
<tr>
<td>3.2</td>
<td>Cronbach’s Alpha Test for Item Reliability</td>
<td>82</td>
</tr>
<tr>
<td>4.1</td>
<td>Principal Component Factor Analysis Cumulative Percent of Variance</td>
<td>92</td>
</tr>
<tr>
<td>4.2</td>
<td>Factor Analysis Results for Survey Questions</td>
<td>93</td>
</tr>
<tr>
<td>4.3</td>
<td>T-test for Equality of Means, Factor 1</td>
<td>95</td>
</tr>
<tr>
<td>4.4</td>
<td>Cronbach’s Alpha Test for Item Reliability</td>
<td>96</td>
</tr>
<tr>
<td>4.5</td>
<td>Mean scores and T-tests for Subcategories in Factor 1</td>
<td>97</td>
</tr>
<tr>
<td>4.6</td>
<td>T-test for Equality of Means, Factors 2-8</td>
<td>98</td>
</tr>
<tr>
<td>4.7</td>
<td>Three Year Performance on TAKS Tests, All Grades Combined, Low Performing</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>Schools</td>
<td></td>
</tr>
<tr>
<td>4.8</td>
<td>Three year Performance on TAKS Tests, All Grades Combined, High Performing</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>Schools</td>
<td></td>
</tr>
<tr>
<td>4.9</td>
<td>TAKS scores, 2004 and 2005, Fifth Grade African-American and Economically</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Disadvantaged Students’ Passing Rates, Interviewed Schools First Administration Only</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 1
THE RESEARCH PROBLEM

Introduction

Americans take pride in the leadership position that our country enjoys throughout the world. Frequently referred to as a superpower, the influence and expertise of the United States is often envied by other countries, especially for its economic prowess. For example, since 1995, economic growth in the United States has measured 3.3%, compared to Europe’s 2% growth rate and Japan’s growth rate of 1.3% (Samuelson, 2005). When similar comparisons are made to other nations’ educational outputs, however, the results are not so flattering. In fact, often the contrasts point to the rather dismal performance of American students in relation to students in other countries throughout the world.

In educational achievement, an area of productivity that is critical to individual as well as national success, we appear to lag significantly behind other countries’ performance. The United States ranks 28 out of 40 countries measured on the mathematics assessment of the Programme for International Student Assessment (PISA) conducted in 2003 by the Organization for Economic Cooperation and Development (OECD PISA, 2004). This assessment had a sample size of well over 250,000 students from 41 participating countries and required students to construct their own answers as well as answer multiple-choice items. Other data from the assessment indicate that the U.S. spends more per pupil and yet registers less student achievement than other countries that were assessed (OECD PISA, 2004).

This same study also confirms the importance of education for the economic well-being of a nation. In every country studied, graduates of post-secondary education or “tertiary-level
education” (OECD, PISA, 2004, p.105) recorded earnings substantially higher than graduates of secondary education. If for no other reason than this economic one, it is vital for the future of the United States that the educational productivity of all of our nation’s students be improved.

As national educational assessment data are examined further, it is apparent that students who are of minority status and economically disadvantaged have lagged significantly behind their White and Asian peers. Sadly, in a world where a global economy is becoming more prevalent, the evidence suggests that students as a whole in the United States are not performing as well as some students in other industrialized nations. Additionally, minority students and those from economically disadvantaged backgrounds lag even further behind, putting them at a serious disadvantage in future competition for jobs and economic security.

The perils of not providing a strong education to all children seem apparent and worthy of intense focus and commitment to improvement. Haberman (2003), a distinguished professor of education who has long been involved with the study of inequity in schools, wrote an essay decrying the life-long outcomes for students in failing systems. He says,

> Every miseducated child represents a personal tragedy. Each will have a lifelong struggle to ever have a job that pays enough to live in a safe neighborhood, have adequate health insurance, send their own children to better schools than they went to, or have a decent retirement (p.2).

Even in the midst of acknowledged lapses in the educational system and failures of school systems to provide systemically sound educational opportunities, examples of schools exist that appear to defy the odds. As national trend data is examined and the poor performance of students at the national level is made apparent, state specific data show improvement in states that have instituted strong systems and developed standards for student performance. For example, at the national level, 4th grade African-American students gained an average of only 23 points on the NAEP math achievement tests between 1992 and 2003. However, in North
Carolina and Texas where effective statewide systems of assessment have been implemented, African-American students outperformed those national averages. African-American 4th grade students in North Carolina gained 32 points on the same measurement and the same group of students in Texas increased their scores by 28 points (National Center for Educational Statistics, 2003). Similarly, some schools within urban districts appear to find ways to create successful learning opportunities for the most disadvantaged students. Second graders at West Manor Elementary in Atlanta, for example, outperformed 98% of other second graders in Georgia in 2002. West Manor has a student population of 99% African-American students and 80% low income students (Ed Trust, 2005) providing a strong example of a school with extreme challenges and equally extreme results.

As educational practitioners wrestle with the challenge of how to make schools more effective for all students, but especially for students who are low income and African-American, they must also deal with the issues of public accountability that have made the performance of students more visible and also more important to the public. Educational testing and accountability have become a figurative Sword of Damocles threatening educational administrators. The high level of anxiety that accompanies greater accountability is unwelcome by anyone who serves as a building or district-level administrator in a state with high stakes testing. However, the need for this type of accountability is certainly understood, for with increased accountability comes the hope and belief that all students will achieve at high levels of academic performance. School administrators and researchers spend enormous time and energy attempting to learn about school practices that can enhance the performance of students in an attempt to bridge the achievement gap, improve academic performance, and rise to the challenges of public accountability and expectations.
Over the last 25 years, accountability in the form of high stakes testing and results reporting has dramatically increased in public education. In 1976, only 4 states had enacted legislation requiring student proficiency testing. During the next 19 years, almost all states enacted laws or regulations regarding statewide testing, and over one third of states passed legislation that required students to pass a test to receive a high school diploma (McCarthy, Cambron-McCabe, & Thomas, 1998). In today’s politically charged climate, students, teachers, administrators, schools, districts, and states are all held accountable for student performance. This performance is typically measured through district, state, and/or national assessments and reported widely through the media.

In spring 2003, the Texas Assessment of Knowledge and Skills (TAKS) was first administered to the state’s public and charter school students in grades 3 through 11. The newest version in Texas’ 2 decade long implementation of standardized testing, TAKS is the 4th generation of Texas’ criterion referenced tests. The Texas Legislature passed a law in 1979 establishing the first state mandated testing program (Cruse, 1985), and the first series of tests, the Texas Assessment of Basic Skills (TABS) was administered to students in grades 3, 5 and 9 from 1980-1985. TABS was followed in 1985 by the Texas Educational Assessment of Minimal Skills (TEAMS), and additional testing grades were added, along with a requirement for proficiency for high school graduation. The TEAMS was replaced by the Texas Assessment of Academic Skills (TAAS) in 1991 (Haney, 2000) and TAKS is the latest step in an evolutionary testing process. Each test has been purposefully designed to test higher levels of skills and cognitive abilities than earlier versions of the test. In addition, the No Child Left Behind legislation also allows for far fewer exemptions from testing than had previously been allowed so more students are required to take state assessments than ever before.
In addition to state level efforts, the federal government has become heavily involved in the assessment and accountability movement. The No Child Left Behind Act (NCLB) of 2001 is federal legislation that requires states annually to test students in grades 3 through 8 in reading and math by 2005-2006. A component of the national legislation that was not previously included in Texas’ accountability is the requirement for schools to make adequate yearly progress (AYP) towards 100% proficiency by 2013-2014 in reading and math for all students in grades 3 through 8 (Texas Education Agency, 2003). The results of these tests will be published in school report cards and disaggregated based on a variety of factors, including economic status and ethnicity. Schools that fail to make sufficient progress will face a multitude of consequences.

On an individual level, students in the state of Texas are required to pass certain levels of the TAKS in order to proceed to the next grade or in order to satisfy graduation requirements. Third graders must pass the TAKS reading test in order to be promoted to grade 4, and 5th graders must master both the reading and math sections in order to be promoted to grade 6 (Texas Education Code, §28.0211, 1999). Students at grade 11 must show mastery on both the math and english/language arts portion of the test in order to meet graduation requirements.

What has driven the increasing call and requirement for testing for all students? Public demand for a standard against which all schools could be measured translated into legislation for testing and accountability. Test scores produce numbers and statistics that can be compared and easily understood, even by those without expertise in the field. In addition to serving as a measurement tool, proponents of accountability systems argue that testing results can serve as a lever for the improvement of instructional practices (Hamilton, Stecher & Klein, 2002). Some educators argue that a more nefarious reason for the increase in testing emanates from a desire on
the part of some special interests for public education to fail in order to pave the way for vouchers and charter schools.

Legislators across the nation wrestle with the charge of implementing accountability systems in a systemic manner, and policy makers who are involved with education issues at all levels argue that, without scrutiny from outside, students who are economically disadvantaged, English language learners, or from minority ethnicities suffer from educational inequalities. Quenemoen, Lehr, Thurlow, and Massanari (2001) assert that obtaining data to drive instructional improvement should be the purpose of assessment systems. If student data are not visible to the public eye, the public and legislators are ignorant of the discrepancies within the educational system that may have negative impact upon certain groups of students.

Educators may feel freed from the onus of responsibility for testing outcomes when attention is not focused on the performance of specific groups of students (Albrecht & Joles, 2003). A lack of scrutiny of educational outcomes for subgroups may have the effect of a reduced sense of urgency for delivery of curriculum and instruction that moves students to higher levels of performance. Movement toward increasingly high curriculum standards should guarantee students’ later success in either the work force or further educational endeavors. The spotlight from both the federal and state governments on analysis and reporting of scores of specific student groups has greatly diminished the possibility of students “falling through the cracks” from year to year.

One group of students to benefit from the increased scrutiny of accountability and standards based assessments are those who are classified as economically disadvantaged. In the state of Texas, students are categorized as economically disadvantaged if they participate in the federal school lunch program. Because of their economic status, these students frequently have
experienced high mobility, and their parents usually have less education than parents of their more successful peers. Frequent mobility typically results in curricular exposure that is fragmented and not cohesive, further distancing the academic performance of these students. Parents of students who are economically disadvantaged often have had poor school experiences and lack the skills to help support their students’ efforts at school. Students may have less exposure to real world experiences than their more privileged counterparts have had, which again puts them at a disadvantage when struggling to make connections between past experience and new learning.

Another group of students that should benefit from the spotlight on specific student group performance are those of a minority ethnic background. In particular, African-American students must compete in the public education system but have traditionally not performed as well as their Anglo counterparts on standardized tests. In spite of improvements in testing performance over the past decade, African-American students continue to lag behind White students in the National Assessment of Educational Progress (NAEP) tests. In math and in reading, at both grades 4 and 8, African-American students’ scores have improved, but they continue to trail White students by a considerable margin. For example, in 1990, the average scaled score in math for African-American students in the 4th grade was 188, but that had risen to an average scale score of 216 in 2003. However, White 4th grade student performance rose on the same measure from 220 in 1990 to 243 in 2003 (U.S. Department of Education, 2003). In a measure of grade 4 reading skills, 26% of White students were categorized as “below basic” while 61% of African-American students were “below basic” (U.S. Department of Education, 2003b). The state of Texas reports summed performance for all students in reading and English/language arts. In 2004, 89% of all White students passed the reading or language arts TAKS, while only 71% of
African-American students in the state passed. In mathematics, 78% of all White students in the state passed, as compared to 49% of all African-American students (Texas Education Agency, 2005). While both groups showed increases from the year before, the performance of the African-American students continued to lag significantly behind that of their White peers.

While approximately one-third of all African-American children in the United States live in poverty, (Proctor & Dalaker, 2003) over 50 percent of the African-American students in Texas are categorized as economically disadvantaged. Classification as economically disadvantaged is based on family income, and students qualify for reduced lunch if their annual family income is not more than 85% above the poverty level, and free lunch if their annual income does not exceed 30% of poverty level (USDA, 2005). Students identified as economically disadvantaged passed the TAKS reading/language arts tests at an aggregated rate of 70%, compared to the state average of 80%. Math passing rates for economically disadvantaged students were 55%, compared to 66% for the state average passing rate for math (Texas Education Agency, 2005).

As African-American economically disadvantaged students struggle with curriculum requirements, their successful performance is more critical than ever to the well-being of each public school campus. In the state of Texas, data for specific student groups are disaggregated from group results in order to provide focus on these students. Groups of 30 or more students in a school in any category of 5 ethnicities, economically disadvantaged, and limited English proficiency will affect the school’s performance rating because the overall school rating will depend on the lowest of any group’s passing rates. At the district level, 50 students in any one student group will create a student group report that will affect the district’s rating (Texas Education Agency, 2005b).
Under the newest rules for accountability, introduced in April 2004 and revised in April 2005, Texas schools must achieve passing rates of 90% of all students, including all student groups with sufficient members, in order to be rated exemplary. In order to be recognized, all students and groups must be at levels higher than 70%, and the academically acceptable passing rate requirement is 25% for science, 35% for math and 50% for reading and writing. These rates will stay in place for 2005, but in subsequent years, passing rates for the recognized and academically acceptable rating will begin to increase by 5% each year. In 2010, academically acceptable will require passing rates of 50% for science, 60% for math, and 70% for reading and writing, and recognized will require passing rates of 80% across the spectrum of tests administered (Texas Education Agency, 2005b).

The culture of testing and accountability has become a fixture in the state since the earliest days of accountability. Anecdotal reports circulate frequently among educators in Texas of schools or districts who missed obtaining the state’s highest rank of “exemplary” or “recognized” under the Academic Excellence Indicator System (AEIS) because of 1 child missing only 1 question (Austin & Williams, 2005). One child’s performance has enormous impact in a district where realtors tout a school district’s ratings in their promotions to prospective home buyers, and patrons and parents alike are well-versed on the impact of the state ratings for economic and public relations reasons. Consequently, it is apparent that the stated aim of increased accountability to improve performance for all students has amplified the attention and focus of educators who cannot afford to let one child lag behind their more successful peers. This increased focus has created a change in environment which has been beneficial for those students who do not come to school with the same advantages as others. The shift in culture has forced examination of practices and policies in order to give each student the supports and
instruction needed to be successful on the state tests, and by extension, for mastery of grade level curriculum requirements. With this increased focus comes the realization that different methods and approaches may be necessary for all students to succeed.

One thing is clear to those who are responsible for student achievement: the public will continue to expect and demand high levels of student performance on standardized tests which provide the data for school ratings or rankings. In addition, the moral and economic imperative for closing the achievement gap places a heavy responsibility on educators. Therefore, the pressures that accompany high stakes testing have the intended effect of creating a change in mentality for teachers of students who are at risk for failure. Previously, teachers and administrators may have been quick to dismiss students who were labeled at-risk as not being capable of learning the material. Since there was no, or limited, accounting and reporting, students who struggled with learning new material often “fell between the cracks” and focused attention was not always provided for their needs.

Lack of attention is no longer an option because public demand for high performance is a constant. Public school personnel are faced with meeting every student’s needs in spite of conditions that might previously have created an excuse or rationale for failure. No longer is it acceptable for a teacher to say that children cannot grasp a concept or that their home conditions will keep them from learning. The belief is that somehow, someone must be able to reach each child and improve his or her knowledge and skill level. This expectation leads to continued questioning and refinement of current practices in order to achieve the level of expected success for all students. Haberman (2003) asserts that effective leaders in urban schools determine ways to navigate failed systems in order to create schools that are effective for disadvantaged students. This current research is an effort to investigate and identify practices that leaders of effective
schools have utilized that appear to produce greater student achievement results, in particular for economically disadvantaged African-American students.

Statement of the Problem

Discrepancies between the results of all students, White students, and the student groups of African-American and economically disadvantaged students on the state mandated Texas Assessment of Knowledge and Skills (TAKS) test point to the failure of many schools to adequately prepare African-American economically disadvantaged students for success on the elementary reading and math portions of the test. National testing data also confirms evidence of persistent gaps in achievement between African-American and white students. Conversely, some schools with high percentages of minority and economically disadvantaged students manage to produce consistently better than average results with these subpopulations.

The problem for educators not just in Texas, but across the nation, is how to close the gap between the academic performance of White students and African-American students, particularly those who are economically disadvantaged and at risk of school failure.

Research Questions

The research questions that are the impetus for this study begin with an overarching search for why some schools have success on state administered criterion referenced tests while others with similar demographics have much poorer performance. Specific questions that will be asked, analyzed, and reported include the following:

1. What differences are found among low and high performing schools in the area of student teacher relationships?
2. What differences are found among low and high performing schools in the area of principal leadership?
3. What differences are found among low and high performing schools in the expectations for student performance?

4. What differences are found among low and high performing schools in the use of data to drive student achievement?

5. What differences are found among low and high performing schools with regard to teacher effectiveness?

Significance of the Study

As teachers and administrators throughout the nation struggle to close the achievement gap between different student groups, it is imperative that methods of providing effective instruction to all students be studied and implemented in schools. Failure to adjust approaches in order to bridge gaps in achievement between groups of students could be fatal to individual schools and districts and could provide evidence that opponents of public education might use to further the efforts to privatize education. In addition, under current state legislation, students who are not successful at 3rd grade reading and 5th grade math and reading tests are not promoted to the next grade and may face emotional challenges and greater obstacles for completing school as a result of being retained. The long term effects of lack of academic progress are also a significant catalyst for examining school practices in an attempt to narrow the achievement gap and increase opportunities for all students.

Antithetically, some schools have experienced great success with significant populations of African-American and economically disadvantaged students. Their experiences and insights could provide useful information for practitioners searching for ways to improve student achievement and close achievement gaps at other schools throughout Texas. It is the intent of this research to determine school practices identified as most likely to positively impact the academic performance of African-American economically disadvantaged students on the state mandated criterion referenced test Texas Assessment of Knowledge and Skills (TAKS).
Rationale

This research will explore factors that may contribute to the success of some schools in order to provide insight and direction for improvement to school communities hoping to increase the achievement of all students, focusing in particular on economically disadvantaged African-American students. In Texas in the school year 2003-04, 14.3% of students were African-American, and 52.8% of all students were economically disadvantaged (TEA, 2004). In the school year 2004-2005, 14.2% of students were African-American, while 54.6% were economically disadvantaged (TEA, 2005). Passing rates for African-American students, while increased from the previous years’ tests, still lagged behind the state averages for all students and significantly behind the performance of White students. The average performance in reading for all students at the state level was a passing rate of 80%, for White students 89%, and for African-American students only 71%. Performance in mathematics for all students resulted in a passing rate of 66%, while White students across the state had a passing rate of 78%, but only 49% of African-American students passed.
This research will focus on identifying aspects of school life that are theorized to impact positively African-American students who are economically disadvantaged. As a result of examining what has been successful in schools, the concept of academic resiliency has received attention. This construct is seen as “alterable processes or mechanisms that can be developed
and fostered for all schools” (Waxman & Huang, 1997, p. 9). The focus of this research is to identify those processes and mechanisms that may be altered in order to produce more positive results for African-American economically disadvantaged students who have typically not performed as well as White students who are not economically disadvantaged.

It is anticipated that academic expectations and increased focus on achievement as well as positive relationships between teachers and students will account for significant differences among successful and non-successful schools. Other factors, including principal leadership, teacher effectiveness, and the use of data for instructional improvement will also be explored in the search for factors that positively affect school performance for economically disadvantaged African-American students.

Methodology

A comprehensive review of the Texas Academic Excellence Indicator System for a large urban district in north central Texas yielded 92 schools with populations of both African-American and economically disadvantaged students that were greater than the state averages of 14.3% and 52.8% respectively. These 92 schools were sorted by their 2004 AEIS school ratings into 2 categories of successful and non-successful schools. Initially, these 2 groups were defined as successful if they had been awarded the state accountability rating of recognized or exemplary, the state’s top 2 accountability ratings, or unsuccessful if they were rated acceptable or academically unacceptable, the 2 lowest ratings. This initial categorization yielded 49 schools that were unsuccessful and 43 that were successful.

Realizing that the range of passing rates was large within these state ratings, another test was applied that reviewed results at grade 5 for each of the schools. The rationale for choosing
grade 5 was that historically, student performance on the state tests decreases at grade 5. Therefore, schools who could meet or exceed the state average at grade 5 were achieving results that many schools are unable to achieve. This closer scrutiny of the performance data revealed that only 16 of the previously identified successful schools had passing rates on the 5th grade reading and math tests that were at or above the state average for African-American and economically disadvantaged students. Thirty-nine schools were found to have passing rates for 5th grade math and reading for African-American and economically disadvantaged students that were below the state average. This sample population was intended to represent the larger population of schools who are more and less successful with 5th grade students’ performance on the state-mandated criterion referenced TAKS test. Survey data was requested of principals at each of the selected schools in order to account for factors that contribute to differences in performance between the 2 groups. Independent sample t-tests for equality of means were used to determine factors that were significantly different between the 2 groups of schools.

In addition to the survey data, an in-depth structured interview was conducted with 4 principals from high-performing schools and 4 principals from low-performing schools. The interviews were transcribed, and the resulting data was analyzed for patterns and themes to provide insight into the differences among the 2 groups.

Limitations

This study will be limited by the use of aggregate data to delineate successful and non-successful schools. Critics of the use of such aggregated data point out that results that are a composite of a group do little to provide insight into school effects on individual students (Goldstein, 1997). In addition, the study is limited by a focus on 1 cohort of students instead of a
school’s performance history over time. This focus on a single cohort of students has previously generated criticism of the body of effective schools research (Goldstein, 1997).

The study will also be limited by a focus on results of student performance on state-mandated criterion reference tests to define successful and unsuccessful schools. Student performance on standardized tests is not the only indicator of the quality of student learning, but it does provide the ability to compare school performance in a quantifiable way. However, by focusing only on the scores from standardized tests, this research does not attempt to incorporate any other measures, such as student performance assessments or grades that also serve as indicators of student learning.

In addition, it does not attempt to measure parent or guardian satisfaction with the studied schools, which can also be a measure of the school’s success in the eyes of the community. By limiting the focus of this study to student performance on a “one-shot” test, other factors that could be highly valued by the school and supporting community are eliminated as measures of success, providing a very narrow definition of success for the multi-dimensional process of education.

This study will also be limited by the survey instrument used. This survey instrument was created specifically for this research project and will not have a proven history of reliability and validity. However, the pilot study and review by content validity experts is an attempt to minimize the lack of history.

Delimitations

A delimitation of this study is the number of subjects studied. Elementary schools who met the criteria for high-performing were more difficult to find than those who met the criteria
for low-performing, both for the pilot study as well as final study. While low-performing schools were more plentiful than high-performing ones, the total sample size is still relatively small in proportion to the number of schools in the state, making the data difficult to generalize.

An additional delimitation to this study will be the time lag between the data used as the basis for comparison and the information gathered from school administrators. Data sets were from the spring 2004 administration of the standardized tests. Surveys and interviews were conducted in summer and fall 2005, and winter 2006, creating a significant lag of time between the conditions that may have existed at the time of the test administration and the completion of the survey. While administrators were asked to answer the questions as they pertained to their school at the time of the test administration, it is difficult to believe that the answers submitted will not have been affected by the lapse of time and changed perceptions that occur as memories fade.

In addition, when the 3rd round of surveys were sent to the schools who qualified based on 2005 test performance, the notation to answer based on school year 2003-04 was not eliminated from the survey instrument. While it is reasonable to assume that they would answer questions based on their most current experience rather than using experience from 2 years ago, this notation does somewhat compromise the analysis of data received for 5 of the schools who responded.

Four of the administrators who completed surveys in summer 2005 had been recently reassigned to other schools. Because they had only recently been transferred, it is believed that their answers to questions about their previous schools were accurate. However, there could be some contamination of perceptions since they were no longer a part of the former school. On the other hand, it is possible that their answers were more objective because they no longer felt a
sense of belonging with their previous school and could answer from a more detached perspective.

An additional delimitation is the sample of administrators interviewed. Because of the difficulty of gaining access to principals for interviews, despite repeated efforts and numerous attempts, the interviews were eventually scheduled with any principal from the representative group who would agree to be interviewed rather than based on a particular school characteristic. As a result, the study is further limited in the representation of schools and administrators, because interviews were scheduled based on availability.

Assumptions

It is assumed that administrators who provided information to this researcher answered truthfully when asked about practices and beliefs. Although it is the assumption of this study that administrators will answer truthfully, it is likely that administrators’ answers will be impacted by the passage of time, memories tainted by intervening events, and a shortage of time required to answer questions carefully and thoughtfully.

School performance data are assumed to be accurate and representative of student performance. Student performance is expected to have been free from outside contamination of testing conditions, and testing protocols mandated by the state in administration of the state tests are assumed to have been followed.

Operational Definitions

Academic Excellence Indicator System (AEIS): A system of accountability and reporting mandated by the Texas Legislature and used by the Texas Education Agency to report
performance of campus, district, and state results on state assessments as well as information on expenditure, staffing and other facets of public schools in the state.

**Economically disadvantaged**: Students who qualify for participation in the federal lunch program, either at a reduced price or at no charge. Reduced lunch is provided to students whose family income is no greater than 185% of the poverty level, and free lunch is provided to students whose family income is no greater than 130% of poverty. Poverty level income differs by family size and area of the United States. In Texas, a family of 4 would qualify for reduced meals if their annual income was no greater than $34,873, and for free lunch if their annual income was no greater than $24,505 (United States Department of Agriculture Food and Nutrition Service, 2005)

**African-American**: Students who have ancestors from Sub-Saharan Africa, also referred to in this paper as Black or Afro-American.

**White**: Students who are predominately descended from European ancestry. White may be used interchangeably with Anglo or European-American in this paper.

**Successful schools, also referred to in this paper as high-performing schools**: For purposes of this research, schools that have enrollments of African-American and economically disadvantaged students equal to or greater than the state average enrollment for these 2 populations that also achieved passing rates at or above the state average on the 5th grade math and reading TAKS tests for African-American and economically disadvantaged students will be considered successful.

**Non-successful schools, also referred to in this paper as unsuccessful or low-performing schools**: For purposes of this research, schools that have enrollments of African-American and economically disadvantaged students equal to or greater than the state average enrollment for
these 2 populations that did not achieve passing rates at or above the state average on the 5th grade math and reading TAKS tests for African-American and economically disadvantaged students will be considered non-successful.

**PDAS:** Professional Development and Appraisal System. The primary teacher evaluation instrument used in the state of Texas.

**TAKS:** Texas Assessment of Knowledge and Skills. The primary assessment vehicle for students in the state of Texas since 2003.

**TEKS:** Texas Essential Knowledge and Skills. The state curriculum for students in pre-kindergarten through grade twelve.

**Organization of Dissertation**

This dissertation is organized in a typical manner. Chapter 1 details the current environment of high accountability for public schools, the performance gap between African-American and White students, and the need for a focused search for school behaviors that will support the improvement of African-American economically disadvantaged students’ academic achievement as measured by criterion referenced state-mandated tests.

Chapter 2 presents a review of the existing literature to provide a theoretical basis for the exploration of linkages between teacher-student relationships, high expectations, the examination of data to impact instruction, principal leadership, teacher effectiveness and student performance.

Chapter 3 describes the methodology used in this research in detail, beginning with the process for selecting schools included in this research. Survey construction and interview questions will also be presented and explained.
Chapter 4 presents information gained in statistical format from the survey results, including quantitative data analysis of factors hypothesized to have impact on school performance. Chapter 4 also presents more detailed information found during the structured interviews with school administrators and the analysis of the information from these interviews.

Recommendations and conclusions are contained in Chapter 5, including future research questions that are generated through the search for characteristics of high performing schools.
CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Since the publication of the Coleman report in 1966 which stated that “variations in family background account for far more variation in school achievement than do variations in school characteristics” (Coleman, Campbell, Hobson, McPartland, Mood, Weinfield, and York 1966/1979, p. 218) educational researchers have looked for evidence that schools can make a difference in spite of difficulties that pupils may experience outside of the school. The search for evidence that schools can, and were, making a difference in spite of overwhelming difficulties faced by their students resulted in equally compelling and opposing evidence to Coleman’s conclusions.

Attempts to identify factors that appear common to schools that are more successful with minority students frequently point to research completed more than 3 decades ago, when the first rounds of effective school research were completed as a rebuttal to the Coleman report. Some of the early studies identifying the impact that schools had on minority and disadvantaged students included the Phi Delta Kappa study in 1980 that looked at factors common to 8 urban elementary schools who were experiencing success, the late Ron Edmonds’ seminal work on effective schools for urban poor students in 1979, and an analysis by Brookover and Lezotte of school improvement in Michigan (1979). Many of these works identified factors that appeared to be common to schools that were experiencing success with students, especially students from diverse ethnic groups who were economically disadvantaged. The belief in the importance of school efforts and the ability of school leaders to impact school effectiveness is the underlying foundation of this current study.
In order to develop adequate background knowledge in preparation for this study, especially from the perspective of the African-American community, literature from African-American scholars who have focused on the quest for improvement of educational opportunities for African-American students was reviewed at the outset of this search. Several scholars focused on the performance of African-American students in systems that are primarily designed for middle class educators and are often considered hostile to African-American students (Hale, 2001; Kunjufu, 1989; Kunjufu, 2002, Ladson-Billings, 1994; and Thompson, 2004). Hale (2001), for example, argued that it was not possible for African-American parents to conform to the expectations of the established educational system and instead asserted that “educators need to focus on what we can do to improve our efforts between 8:15 and 3:15 Monday through Friday” (p.9). The perspective provided by these educators was instrumental in the initial direction of this study.

In a further attempt to isolate factors that current practitioners believed were most influential to their schools’ performance on the TAKS test, a small and informal survey of elementary school principals in an urban school district was conducted in spring 2005. These principals were assigned to schools with high percentages of economically disadvantaged and African-American students. All but 2 of the schools had populations that exceeded both the state average for economically disadvantaged and African-American students. Each of the schools had campus performance averages for all grades tested that exceeded the state average summed performance for African American and economically disadvantaged students in at least 1 of the tested subjects, either reading or math. Most of the schools exceeded the state average for test performance in both reading and math for overall student performance, as well as for the sub populations of African-American and economically disadvantaged students.
Principals from 23 schools in the urban district were sent a list of possible factors that might have contributed to their schools’ success. The list of factors was created through a review of literature and professional conversations and included the following choices: 1) a purchased program such as Accelerated Reader; 2) time for and expectations of collaboration; 3) use of data; 4) culturally sensitive curriculum; 5) African-American teachers; 6) high expectations for students; 7) relationships between teachers and students; 8) principal leadership in instruction; 9) parent involvement efforts; 10) teacher knowledge of the curriculum and appropriate pedagogy; 11) tutoring programs; 12) small group instruction and 13) staff development efforts. Responses were eventually received from 14 administrators.

Principals were asked to assign a numerical value to the top 3 factors they felt had most contributed to their school’s success. These numerical values were then reverse-coded. For example, a 1 on the survey was given a value of 5 points, and a 3 on the survey was given a value of 1 point. The 5 elements receiving the most points were the following: 1) high expectations for student achievement, which received 30 points; 2) the relationships between students and teachers, which resulted in a total of 26 points; 3) teacher effectiveness, which accumulated 23 points; 4) the use of data to inform instruction, which yielded 21 points and 5) principal leadership, which received only 15 points. This informal survey data appears to be supported by a subsequent review of the existing literature regarding schools that show evidence of effective results for African-American students.

Next, the effort to identify recent research about differences among schools that serve similar populations but have dramatically different results in pupil achievement began with an Academic Search Premier review that used the terms “African-American” “economically disadvantaged” and “students” but did not yield significant research for review. A subsequent
search which included the terms “high expectations” and “student performance” yielded a large body of data, that was examined for articles specifically pertaining to African-American and/or economically disadvantaged students. A search of Dissertation Abstracts using the terms “African-American” “economically disadvantaged” and “students” yielded 72 dissertations. That list was reviewed for focus on African-American student performance and approximately 10 of these dissertations were retrieved and reviewed.

Subsequent searches included the key words “effective schools” which produced a large list of research review, and again specific focus was placed on those studies which dealt primarily with African-American and economically disadvantaged students. Additional searches were completed to review literature related to “use of data and student achievement” “teacher/student relationships and student achievement” “principal leadership and student achievement” “teacher effectiveness and student achievement” and “teacher efficacy and student achievement.”

This chapter examines in greater detail the research regarding these common practices and approaches that have been reported to influence the quality of schooling for African-American students in poverty. Even with recent improvements in test scores for minority students, a persistent gap in performance continues between these minority and majority groups of students (U.S. Department of Education, 2003 and 2003b). The focus of this chapter is to provide a background of literature that will present information regarding the ability of schools to impact positively that performance gap. Five factors are hypothesized to impact the performance of students in a positive way, including high expectations for performance, student/teacher relationships, teacher effectiveness, principal leadership and the use of data.
Effective Schools

There are striking parallels between the 5 identified factors that guide this current research and the work that is identified by Reynolds and Teddlie (2000) as belonging to the 3rd phase of the school effectiveness research movement. School effectiveness research began in the United States in the mid-1960s, with phase 1 research incorporating an input-output design. The initial phase of school effectiveness research continued until the early 1970s, and the most well-known study from this era was the Coleman report (Coleman et al., 1966) which reported that schools had minimal impact on student improvement.

Phase 2 of school effectiveness research occurred during the early to late 1970s and provided the beginning of the effective school studies. These studies took a broader approach to school outcomes than earlier research, and were primarily conducted to refute the findings from the Coleman report (Reynolds & Teddlie, 2000).

From the late 1970s to the mid 1980s, phase 3 studies focused on effective school “correlates” (Reynolds & Teddlie, 2000, p. 4). These correlates, or attributes of successful schools, were defined by Edmonds (1979) as 1) principal leadership; 2) instructional focus; 3) safe and orderly climate; 4) teacher expectations and 5) the use of assessment measures. Edmonds was perhaps one of the most influential voices in the school effectiveness movement, who convincingly communicated his belief that schools could make a difference for student performance (Good & Brophy, 1986).

Later research, identified by Reynolds and Teddlie (2000) as stage 4 in the movement, attempted to introduce context factors and more sophisticated methodology and primarily took place from the late 1980s to present day. However, “since the mid-1980s, there has been much less activity in school effectiveness research in the U.S.” (Reynolds & Teddlie, p.13). Based on
attempts to locate current research involving effective schools, it is apparent that the
preponderance of more current research into school effectiveness is being conducted in Great
Britain and the Netherlands, with little recent school effectiveness research literature produced in
the United States.

School effectiveness research has generated criticism throughout its history for design
and methodological difficulties. Good and Brophy (1986) and Reynolds and Teddlie (2000)
point to the lack of longitudinal studies of school improvement projects as one of the criticisms
that has been directed toward the school effectiveness research movement. Good and Brophy
(1986) also note that, in much of the effectiveness research, it is difficult to determine if a school
is successful with all students when average scores are the unit evaluated. Much of effectiveness
research depends on average student performance as the unit of analysis for school effectiveness.
This argument is echoed by other critics of school effectiveness research. For example, Jansen
(1995) synthesized several critiques of effective school research which not only criticizes the use
of aggregate data, but lists other facets that could be considered damaging to the credibility of
effective schools’ research. Among those other criticisms were 1) the use of outlier schools for
comparison, since most schools are average and not extreme; 2) methodological limitations,
often because of the qualitative nature of the study; 3) difficulty with the level of analysis, since
there are multiple layers of schooling effects that contribute to school performance; 4) the
possibility of observer bias, since much of the research is qualitative; 5) theoretical weakness and
6) a focus on standardized tests as the measure of school effectiveness.

In spite of these criticisms, school effectiveness research has continued to be a topic for
research in a continuing effort to determine school practices that can be modified to meet the
needs of students in countries throughout the world. While it is not the intent of this research to
presume to conduct school effectiveness research, the early influence of school effectiveness research is apparent as attention is turned to the 5 factors hypothesized to be important to schools that are more successful with African-American economically disadvantaged students. The parallels between the 5 factors identified in this current research and the 5 correlates identified by Edmonds (1979) certainly appear to strengthen the theoretical basis for focusing on these 5 areas, beginning with student teacher relationships.

**Student Teacher Relationships**

Educators who have worked with students of any age know intuitively that their relationships with students have an impact on both parties. Educational philosopher Noddings opines, “Students will do things for people they like and trust. They listen to people who matter to them and to whom they matter” (1992, p. 36). Researchers investigating resiliency, defined as humans rising above circumstances to perform at higher than expected levels, confirm this opinion by reporting “perhaps no single fact emerging from resilience research is more important than the finding that having contact with a genuinely caring adult (beyond the family) is important to every child” (Reynolds, 1994, p. 136). A supportive relationship with an adult is one of the critical protective factors identified in the literature on student resilience (Becker & Luther, 2002). Making school a welcome place is a necessary component for engaging African-American and Hispanic students in the learning process, and this requires teachers to build relationships with them (Evans, 2005).

A longitudinal study of 3,981 3rd grade students conducted in 2004 as a part of the Prospects: Congressionally Mandated Study of Educational Growth and Opportunity Study included a population that was 15% African-American, 19% Latino, and 66% White. The
Borman and Overman study, designed to measure academic resilience in mathematics among poor and minority students, found significant differences for positive teacher-student relationships and “a more supportive school environment was associated with students’ academic resilience” (p. 190). A multilevel analysis of schools as communities that provided data from 4,515 students in grades 3-5 from 24 participating schools included questionnaires given to students and teachers. The findings in this 1995 study led Battistich, Soloman, Kim, Watson, and Schaps, to suggest that

the support, commitment, and goal clarity provided in a caring school community may serve to compensate for the relative lack of such qualities in the lives of some students outside of school and thereby allow those students to develop the motivation and direction they otherwise might not have (p. 650).

A 4 year longitudinal case study of 80 pupils in Great Britain conducted as a part of the core project Making Your Way Through Secondary School found that students repeatedly emphasized how important interpersonal relationships were with teachers who took time to listen. The study, supported by the Economic and Social Research Council, focused on students from 3 schools with high levels of poverty and large numbers of minority students. These schools were classified as “reasonably buoyant” (Wallace, 1996) despite their challenging student population.

Similarly, a study of demographically comparable inner-city elementary schools with populations of African-American students greater than 90% of total enrollment, and economically disadvantaged students greater than 80% of the student population, found markedly different student achievement results. Schools were categorized into 4 quartiles, from effective and efficient schools (EE) that were making exemplary progress in improving student achievement in the top quartile, to ineffective and inefficient (II) schools in the bottom quartile. A random sample of 4 schools from both the EE group and the II group were then selected for
further study. Analyzing classroom observation data obtained in these sample schools, researchers found that students in effective and efficient schools interacted with teachers about 70% of the time, versus students in ineffective and inefficient schools where interactions were observed 47% of the time. Students in EE schools perceived that their teachers were more supportive than students in II schools (Waxman, Huang, Anderson, & Weinstein, 1997).

A study of school failure from the perspective of 40 at-risk students utilized a unique form of research. In this design, interviews of at-risk students were conducted by other students who had been trained by researchers. The students were enrolled in a high school where students of color made up 90% of the enrollment. Each of the students interviewed displayed several factors that placed them at risk for school failure. Overwhelmingly, these at-risk students ranked failure of teachers to develop relationships with them as one of the primary causes for their lack of success. The affective dimension of school, characterized by a teacher’s willingness to provide supportive feedback and spend time getting to know students, seemed critically important for these students, and they urged teachers to get to know students individually both in and out of the classroom and to be encouraging of them (Lee, 1999).

**Observations of African-American Educators about Relationships**

Anecdotal evidence from African-American scholars who have studied the struggles of African-American students in school suggests a powerful connection between student teacher relationships and student success. Hale, a professor of early childhood education and the mother of an African-American son, states that “The most reliable path is to center school reform on the school and more specifically, on the relationship between teacher and student - the basic building block of education” (2001, p. 9). In a 2003 ethnographic study of school improvement by
Strahan, Carlone, Horn, Dallas and Ware, teachers attributed at least part of the success of their school’s improvement in performance to the relationships built between teachers and students:

Before you teach them, you have to let them know that you really love and care about them. Once they know you are there for them and care for them academically as well as for whatever else is going on in their lives and that they can trust you, then they will open up to you. They perform better when they know that (p. 216).

A case study of 4 teachers identified as being effective for African-American students found that these teachers believed relationships to be critical to student achievement. Louise, a Haitian-American female teacher who left her former position as a corporate attorney in order to make a contribution as a teacher stated that “once a teacher finds her voice and understands the relationship that she is in with the students, and understands that children, like everyone else, respond to people who love them and care for them, she can make a difference” (Howard, 1998, p. 143). Howard also reported that data obtained during observations of these teachers indicated they were effective because they made “deliberate attempts to meet their students’ psychological, moral, social, emotional, and physiological needs” (p. 154).

Differing Opinions of the Impact of Relationships

A direct link between academic achievement and the affective aspect of schooling was not documented in several studies, however. In a study of 233 middle school students, 45% Euro American and 55% African-American, perceptions of teacher support were not found to contribute independently to changes in academic efficacy. However, the study did find that student perception of teacher support was linked to decreased disruptive behavior (Ryan & Patrick, 2001).

Relationships played a factor in several other studies that point to a decrease in disruptive and off-task behavior, which should improve conditions for learning. A study of 233 students in
7th and 8th grade from 3 ethnically diverse middle schools consisted of 45% European American and 55% African-American students. The researchers found that students’ perceptions of their teacher as supportive were a factor in increased adaptive patterns of learning, and that the teacher’s efforts to understand them and willingness to help them produced less disruptive and off task behavior (Ryan & Patrick, 2001). A study of educational resilience that included at-home surveys sent to 2,598 African-American adolescents also reported that supportive relationships with teachers were related to the reduction of off-track behavior in the students studied (Crosnoe & Elder, 2004) which could be linked to increased achievement.

A sample of 13,121 8th graders who attended schools that participated in the National Education Longitudinal Study of 1988 (NELS:88) also completed a survey instrument on school warmth. The resulting study examined the role of participation as a bridge between school warmth and academic achievement. In other words, students who felt warmth from teachers might be more inclined to participate, resulting in increased achievement. Indeed, the author found that more favorable perceptions of warmth were linked to higher participation, but there was no direct significant link between warmth and student achievement (Voelkl, 1995). While Battistich, Soloman, Kim, Watson, and Schaps (1995) found suggestive evidence for the importance of creating a caring community, their research yielded positive effects only on basic reading comprehension, not on other measures of mean achievement.

Efforts to link academic achievement to teacher support have produced studies that examined the possibility of student teacher relationships affecting components of student learning, such as motivation, attitude and participation. For example, Voelkl (1995) suggested that the importance of a warm and supportive environment is not strongly supported by evidence, but he does theorize that a warm and supportive environment may indirectly improve
performance by encouraging greater levels of participation from students. Battistich et al., (1995) found evidence that a strong sense of community had an impact on academic attitudes which included task orientation, educational aspiration and educational expectations. They also found evidence that student motivation was enhanced when students feel supported, valued and influential.

A study seeking to explore the relationship of caring to student achievement used National Education Longitudinal Study of 1988-1992 (NELS) data, teacher reports of at-risk behaviors, and student self reports of perceptions about teachers to measure correlations between caring and achievement. Only 12% of the total sample population was African-American, but of the portion of the sampled population labeled at-risk, 22% were African-American. Researchers found evidence that students expend extra effort when they believe their teachers care about them, pointing to the likelihood that students who are at risk for dropping out may attain higher levels of proficiency if they perceive their teachers care (Muller, 2001).

Closely linked to effort and motivation is the concept of student engagement in schooling. A study conducted in 6 elementary schools that compared student and teacher perceptions focused on minority students, with 81% of the 1,846 student respondents classified as African-American and 85% qualifying for free or reduced lunch. High levels of engagement have been found to be associated with both higher attendance and test scores, and students who believe teachers create a caring and well structured learning environment with high expectations are more likely to report high engagement in school. In this study, students who experienced high levels of teacher support were 89% more likely to feel engaged in school (Klem & Connell 2004).
Four hundred forty-three African-American adolescents from predominately (87%) economically disadvantaged homes in urban districts in New York State were given student questionnaires, and academic records were later examined to determine relationships between student attitudes at grades 7 through 9 and later patterns of staying enrolled in school. Researchers found that higher levels of support from teachers produced greater academic competence and more autonomous self-regulation (Connell, Halpern-Fresher, Clifford, Crichlow & Usinger, 1995).

Fifteen middle and upper-middle-income school districts joined together in 1999 to form the Minority Student Achievement Network (MSNA), acknowledging racial and ethnic disparities within their school districts and resolving to work together to find ways to narrow the gaps between European-American students and Hispanic and African-American students. The first step of the MSNA was to commission a study to investigate what students of different ethnicities were experiencing in their schools. Students surveyed were in grades 7-11, and the sample included 7,120 African-American students, 17,562 Whites, 2,491 Hispanic, 2,448 Asian, and 4,507 mixed race students. When students were asked, “When you work really hard in school, which of the following reasons are most important to you?” Black and Hispanic students were more likely than White or Asian students to chose, “My teachers encourage me to work hard” as a response. When a small sampling of students in MSNA schools was asked what an encouraging teacher meant to them, they answered by saying it meant teachers who said they could do it, who gave full explanations to help them understand, and who didn’t mind spending extra time with them after school (Ferguson, 2002).

Howard’s (2001) case study of student perceptions confirmed the role of caring in improving student effort and achievement. He interviewed 17 African-American elementary age
students of differing ability levels and found central themes which included the importance of caring teachers and the establishment of a family-type environment. While Howard notes that the development of a caring relationship would be expected from all teachers, the data from students indicated that this is not found in practice among all teachers, and that the use of caring has a major impact on student effort and achievement.

These studies, while not providing direct evidence linking affective measures such as teacher/student relationships to student achievement, do seem to confirm that student perception of teacher investment in the affective domain can positively impact behaviors that have the potential for impacting student achievement such as on-task behavior, dedication to task, engagement in school, and greater academic competence.

*Cultural and Stylistic Differences*

Examination of differences between African-American students and other students inevitably refers to research into affective dimensions of culture and learning that may impact academic achievement. Some of these differences, which could be used to understand and improve student’s performance in school, may relate to deep seated cultural differences that have been transmitted through generations of people. Hale-Benson (1986) states, “Research with Black children has found them to be more people centered. Most Black children grow up in large families where they have a great deal of human interaction” (p. 70). This deep seated people orientation may help explain why relationships could be more critical to African-American students than to those of other ethnic origins.

The strong family orientation of African-American children is a factor in socialization and school performance. A pattern of extended family is an adaptive strategy of ethnic families
(Harrison, Wilson, Pine, Chan & Buriel, 1990), and the African-American pattern of extended family systems may even be derived from African cultural patterns (Hill, 1999). The complex family structures typically found in African-American communities provide mutual aid and support, often in the form of money, information, and help with tasks (Dressler, 1985a) which are significant in individual adjustment to the challenges of daily life (Dressler, 1985b). McAdoo (1978) found that upwardly mobile African-Americans reported the importance of reciprocal helping between members of their extended kin and family networks in reaching their goals of movement from one class to another. Subjects continued close interaction with network members before, during, and after their mobility from one social group to another. McAdoo found that extended family patterns continued to be “a viable cultural component for the emotional well-being of Blacks at all economic levels” (p. 775).

The importance of social support and belonging may be a critical factor for disadvantaged students’ academic motivation, even more so than for other students (Becker & Luthar, 2002). Hale-Benson (1986) reports that rapport with teachers appears to be strongly related to academic performance for African-American students, and not as critical for White students. Supporting this theory that relationships may have more impact on African-American students than others is a finding from Borman and Overman (2004) of “some evidence that effective schools’ characteristics may be more important for African-American students’ resilience than for White and Latino students’ resilience” (p. 191).

In a study of 24 diverse elementary schools, researchers concluded that “the most encouraging aspect of the finding is the evidence that some of its (poverty) effects can be mitigated if the school is successful in creating a caring community for its members” (Battistich et al., 1995, p. 649). Becker & Luthar (2002) have theorized that social support and belonging
may be one of the most critical factors involved in disadvantaged students’ motivation and engagement in school. Resilience researchers believe that while the identification with another person is a human and universal need, it may be critical for students at high risk for failure (Gordon & Song, 1994). In a multilevel analysis of the relationships between learning and social environment to minority achievement undertaken in a metropolitan area, researchers included all students in grade 3-6 in a survey of student perceptions of school learning and social environment. The resulting sample of 25,087 students mirrored race and grade compositions of the 117 schools researched, with mean participation in the free and reduced lunch program at 27% and average African-American enrollment 13.4%. In that study, Griffith (2002) found that effective schools for socio-economically disadvantaged and minority students engender a concerned and caring environment.

Attempts to analyze the importance of relationships for African-American students have resulted in explanations which include a difference in conceptual styles as well as the previously mentioned cultural differences. In a review of the literature on conceptual styles and compatibility with the school environment, Cohen (1969) found the school environment to be a highly analytic frame, whereas many children utilize a relational approach to reality, which she found to be mutually incompatible. She found that for relational children, the school’s organization is disorganizing; the “climate lacks the cues necessary for understanding, or they are ambiguous, and its requirements for social participation are of low value” (p. 837). This can be problematic for children whose cultural background depends on the relationships between its members for strength and support. Hale-Benson, a leading researcher in Afro-centric educational issues, described a trip to Africa where African mothers told her their children do not play with dolls because they play with their mother’s other children (1986). This observation may provide
a window into understanding the differences that have been noted between African-American students’ lack of interests in objects, as well as their preference for relationships over abstract concepts because they are “accustomed to having their learning mediated by people” (Hale, 2001, p. 118). The need for mediation of the environment could be a potential explanation for the apparent importance of relationships for African-American students in the school setting.

Cohen (1969) felt that a relational style precluded many students from understanding linear type relationships, such as the relationship between work and success. Such inability to connect personal investment with future benefit is frequently observed in classrooms and often leaves teachers confused and frustrated by the student’s apparent lack of caring about achievement. However, when examined in the context of cultural patterns, this behavior becomes much easier to understand, and points to the need for increased information on differences among cultures in order for teachers to deal effectively with students who may perceive situations through a completely different framework.

This disconnect between teacher expectation and student understanding of the structure and demands of school can create a situation that provides students with low levels of teacher support, which has the added danger of increasing their detachment from school. In their analysis of 6 elementary schools in an urban district, Klem and Connel (2004) found that elementary students who felt unsupported at school were 93% less likely to feel engaged in school, while those experiencing high levels of support were 89% more likely to feel engaged. The sample size included 1,846 students, of whom 81% were African-American and 85% were eligible for free and reduced lunches. In an ethnographic study of low achieving students, Lee (1999) found in interviews with 40 urban high school students that lack of personal teacher-student relationships contributed to their poor performance, and resulted in resistance toward those teachers that the
students did not feel connected with. However, some researchers believe high levels of support to be more critical to elementary students than to older students (Klem & Connell, 2004).

Strong Relationships Benefit Schools

In today’s environment of high accountability and increased pressure for performance, a focus on the importance of student teacher relationships would appear to be an additional avenue for improving the performance of African-American elementary students. Schaps (2000) found that 3 elements consistently emerged from research into school improvement in the last decade: 1) high expectations 2) challenging, engaging curriculum, and 3) the importance of a sense of community. Relationships between teachers and students are an important component of the sense of community to which Schaps refers, and he advocates for increased emphasis on this sense of community as a low-cost yet effective intervention strategy for those hoping to facilitate school improvement.

For educators who are searching for ways to improve the performance of African-American students, the focus on an affective side of an educational issue may be frustrating rather than reassuring. It is not a program that can be purchased, or a curriculum that can be followed. Building relationships with students is a matter of internal beliefs that affect behavior, and some may discount its possible positive influence. For those administrators and teachers who believe that cultural difference may be involved in the poorer performance of African-American students, however, this research is compelling enough to require serious thought and further study. In examining the evidence concerning the impact of culture on learning differences between African-American students and others, it seems apparent that turning attention to an aspect of school life which is not often examined but appears to have a significant impact on
African-American students could contribute another option for providing insight into and improvement of the schooling experience of these students.

**Expectations and Academic Focus**

We now turn our attention toward examining the effect that high expectations and shared academic focus has on African-American students. In a review of the literature relating to school effectiveness, Muijis, Harris, Chapman, Stoll and Russ (2004) found that a characteristic common to all improving and effective schools was the staff’s holding high expectations for achievement. Edmonds (1979) also listed expectations and focus among the critical attributes of effective schools:

I want to end this discussion by noting as unequivocally as I can what seems to me the most tangible and indispensable characteristics of effective schools: a) they have strong administrative leadership; b) they have a climate of expectation in which no children are permitted to fall below minimum but efficacious levels of achievement; c) the school’s atmosphere is orderly without being rigid, quiet without being oppressive, and generally conducive to the instructional business at hand; d) pupil acquisition of basic school skills takes precedence over all other school activities; e) when necessary, school energy and resources can be diverted from other business in furtherance of the fundamental objectives; and f) there must be means by which pupil progress can be frequently monitored. (p.22)

Data collected during ethnographic studies of improving and successful schools seemed to reinforce Edmonds’ findings. A 3-year long ethnographic study of 3 elementary schools with predominately minority (ranging from 70% to 91%) and economically disadvantaged (ranging from 68% to 85%) populations was conducted to determine factors that contributed to school success. In these 3 schools, test scores rose from less than 50% proficient to more then 75% proficient on statewide achievement tests over the 3 year study period. Data obtained in interviews and observations confirmed that teachers and administrators reported a shared stance toward learning and building classroom learning communities as among the attributes that had
contributed to success in their schools (Strahan, 2003). A more intense look at 1 of these elementary schools resulted in the observation by staff that a culture had been created that includes the belief that all students can learn and that everyone shared responsibility for their learning (Strahan, Carlone, Horn, Dallas & Ware, 2003).

*Culturally Relevant Teaching Begins With High Expectations*

The concept of a culturally responsive curriculum is proposed by some as a positive intervention for improving the performance of African-American youths. Ladson-Billings (1994) describes culturally relevant teaching as beginning with teachers who aim for excellence with their students and act as *conductors*. She depicts conductors as teachers who believe their students are capable of excellence and assume responsibility for ensuring their students achieve at that level. Ladson-Billings also found these teachers believed all of their students could succeed, and they demonstrated a connectedness with their students. Howard (2001) recorded student comments that reflected an understanding of strictness as teachers demanding their best in his study of student perceptions of teacher behavior. He purports high expectations are a core element of a culturally responsive curriculum.

This concept of culturally relevant teaching and high expectations would not be a novel idea to teachers who taught in segregated African-American schools in the years after the Civil War and before the Brown v. the Board of Education Supreme Court decision that required schools to be integrated. Siddle-Walker (2000) completed an historical review of some educators who were revered within a Southern community for their impact on students and found they were “consistently remembered for their high expectations for student success, for their dedication and for their demanding teaching style. The orientation of these teachers appears to
have been that their job was to be certain that children learned the material’’ no matter the obstacle (p. 264). Interviews with students of these teachers, who had gone on to greater educational and professional achievements than their counterparts at the all-White schools in the same community, revealed that they attributed their success and self-confidence to the work of their teachers. Because the teachers had high expectations, the students did not want to let them down. Siddle-Walker observed, “The very nature of teaching in the segregated school appears to have been transformed by these educators who developed a cultural teaching style that assumed students must be motivated to believe they could achieve and be held accountable for learning” (p. 266-267).

The Impact of Expectations

In an ethnographic study that primarily focused on interviews with low achieving students from high schools with predominately minority enrollment, Lee (1999) revealed that students could sense low expectations from some teachers and also recognized the high level of expectations demanded by others. By “continually ’keeping on students,’ teachers communicated a sense of hope and belief in their students’ ability to achieve” (p. 236). Conversely, students reported resistance to teachers who demonstrated a lack of caring and low expectations.

Brookover and Lezotte (1979) in their study of 8 schools, 6 that were improving and 2 that were declining, found that in the declining schools there was a consistent belief among the administrators and teachers that student characteristics had changed and that, as a result, the children were not able to do well in school. Interestingly, the 2 declining schools each had lower percentages of minority students than the average of the 6 improving schools. This provides some evidence that factors other than race can have significant impact on student performance.
The idea that African-American students are often faced with diminished expectations from those responsible for their progress was unthinkable to one who invested her life in improving the educational outlook for students. Madge Scott, an African-American woman who taught in Jacksonville, Florida, schools and then moved to Hartford, Connecticut and taught there until her retirement, stated that “if you have high expectations for children, they will try to meet those goals. My belief is that you would make a child work up to and beyond his ability” (Foster, 1997, p. 42). A Black educator in the Chicago Public Schools shared these sentiments when he stated, “Teachers have to demand from Black urban students the same as they would demand from privileged White students, and they have to be consistent” (Foster, 1997, p. 47).

Haberman (1991) identifies what he labels a pedagogy of poverty present in many urban schools, where teachers assume that children cannot learn and adopt practices that reinforce this belief. In his opinion, students often comply with this arrangement because their investment is lessened. Hale (2001) confirms this culture of low expectations as she recounts her visits to classrooms when supervising student teachers. She complains, “I often hear ‘this is the best we can do with the population we serve’ and ‘most of our children come from single-parent households’” (p. 44).

In her ethnographic study of effective teachers of urban students, Ladson-Billings (1994) identified several factors that she felt were critical to student success, among them a belief that the focus of the classroom must be instructional. Sizemore (1987) conducted a study of 3 urban elementary schools serving primarily African-American (89% or more) and economically disadvantaged (50% or more) students where student performances on the Metropolitan Achievement Test had exceeded national and/or local averages. In 2 of the schools, marked by both high achievement and high growth in student performance, she found that a priority for high
achievement had emerged as a consensus among the staff and teachers had high expectations for student achievement.

A longitudinal study of 8,268 kindergarten students in Pinellas County, Florida, included surveys of parents, teacher and students as well as analysis of student achievement. This study was a part of the Pinellas County Omnibus Project, designed to provide comprehensive information about Pinellas County students. Omnibus cohort students were 76% White, and 22% African-American. A path analysis found a noteworthy difference in the mean score of teacher expectations for African-American students (M=7.49) as compared to White students (M=8.53). For the African-American subjects, the variables that showed higher correlations with mathematics achievement include teacher expectations (r=.54) and parents’ involvement (r=.24). When both groups were pooled (White/African-American) teacher expectations displayed the highest correlation with mathematics achievement (r=.60) (Cousins, 1995).

A study of 45 elementary schools in a large urban Midwestern school district was designed to investigate the relationship between the academic emphasis of the school and student achievement in reading and math. Average student enrollment in the schools was 62% economically disadvantaged and 56% African-American. The results of this study, which included surveys from 442 teachers and achievement data on 2,429 students, indicated that a 1 unit increase in a school’s academic emphasis score was associated with a 16.53 point average gain in student math achievement, and an 11.39 point average gain in reading achievement (Goddard, Sweetland, & Hoy, 2000).

In Marks’ (2000) study of 3,669 students, she found that social support for learning, which included a combination of high expectations for achievement and help for learning from teachers and peers, contributed to a statistically significant difference in student engagement at
the elementary level. Her sample, which included elementary through high school students, also reflected higher than national average enrollment of African-American (20.6% versus 16.3% nationally) but lower than national average economically disadvantaged student enrollment (37% as opposed to the national level of 56%).

An experimental design study by Cohen, Steele and Ross (1999) found that for Black students who received criticism of their writing accompanied by the invocation of high standards and appropriate assurances, the task motivation was notably increased. Students wrote and submitted a letter, which they were told could be submitted to a publication. Forty-four Black and 47 White students were randomly assigned to 3 treatment groups. Group 1 received criticism without any additional comment, while group 2 students received criticism that reassured students they were capable of achieving this higher level of standard. Students in group 3 received criticism with positive feedback, but no mention was made of high expectations. Black-White differences in reaction disappeared under the condition of criticism coupled with high expectation, but motivation for the task increased more significantly for Black students (M=.20) than for White students (M=.05) when they received a critique accompanied by high expectations for performance. This appears to affirm Cousins’ (1995) hypothesis that since teacher expectations seem to have the largest direct effect of any of the explanatory variables on mathematics achievement, then “if teachers held higher expectations for students and manifested these expectations in their instructional behavior, mathematics achievement levels would increase” (p. 115).

A study in Great Britain of 12 schools in inner London that is considered seminal in the effective schools research measured student progress before entering and throughout their secondary school careers. Each of the 12 schools operated in neighborhoods and with student
populations affected by high rates of poverty, parent unemployment and mental illness and all served ethnically and socially mixed groups of students. Five measures of success were used: 1) student behavior in school; 2) attendance; 3) exam success in the 5th year of secondary school; 4) employment after school and 5) delinquency. The main stage of data collection included semi-structured interviews with 219 staff members at the 12 schools, and student surveys were received from 2730 pupils in 3 different grades. Researchers Rutter, Maughan, Mortimore and Ouston (1979) in *Fifteen Thousand Hours* found that “children had better academic success in schools where teachers expressed expectations that a high proportion of the children would do well in national examinations” (p.188).

An ethnographic study of 9 first grade classrooms identified as producing differing levels of student achievement found that teachers in the top group consistently displayed high expectations for all of their students. This study included schools from 4 districts with relatively low percentages of economically disadvantaged students, and only 1 district with significant racial diversity. One teacher commented, “I do expect a really high level- I think a really high level- of achievement from kids” (Wharton-McDonald, Pressley & Hampston, 1998, p. 119). Similarly, a case study of 6 schools successful in improving reading achievement in Vermont found that one of the factors common to each of the 6 successful schools was a focus on a vision or belief in children’s ability to learn (Moshenthal, Lipson, Torncello, Russ & Mekkelsen, 2004). These 6 schools did not represent great racial diversity, but did represent a wide spectrum of socio-economic status.

Anecdotal, case study, historical and quantitative data have been presented to examine the importance of teacher expectations and a clear academic focus for schools to be successful with African-American students. It is apparent from the data presented that a school with high
expectations for all of their students, accompanied by a clear vision and focus on instruction, will have a better likelihood of improving African-American student performance than those schools lacking this critical ingredient.

**Principal Leadership**

Since the early days of school effectiveness research, leadership in effective schools has been identified in the literature as a component that seemed to be common among schools with greater academic success for disadvantaged students. Early researchers such as Edmonds (1979) and Brookover and Lezotte (1979) found evidence that principal leadership impacted the educational achievement of the schools studied. In their comparison of improving and declining schools, Brookover and Lezotte (1979) found that the principal was more likely to be an instructional leader, to be assertive in that role, and primarily, to assume responsibility for evaluating objectives for learning. Edmonds (1986) agreed and stated that his research on effective schools indicated that principals of effective schools “behave in ways that are observably, demonstrably, and sometimes dramatically different from the way principals behave in ineffective schools” (p. 97).

A study of effective schools enrolling primarily African-American students in 1979-1980 also found support for the centrality of principal leadership to the school’s effectiveness. This study, funded by the National Institute of Education, looked closely at 3 schools classified as effective on the basis of scores at or above the national and/or local mean on standardized tests in reading and math achieved by a majority of the students in the school. “Each principal believed that the African-American poor student could learn and that high achievement in reading and mathematics in an African-American poor school was possible” (p. 188). Researchers found that
these principals often disagreed with district policies and found ways to mitigate the effects of outside interference on the school, often earning the loyalty of their staffs while doing so (Sizemore, 1987).

A case study of 2 schools enrolling predominately African-American students (88.5% and 94.5% minority enrollment) in the Atlantic Coastal region of the United States found that the achievement orientation of the principals made a significant difference in the progress of the school. Urban schools A and B had similar pupil performance in the fall of 1971, with average reading performance slightly over 1 grade level below the national average. However, from that point, urban school A began to post steady improvement in reading scores, and by the end of the 1977-78 school year, over 60% of children at the school were reading above grade level. Extensive interviews, classroom observations and analysis of records, memos and logs found that the primary cause for student improvement at school A was the leadership of the principal. Teachers pointed to the principal’s management skills in making sure they had the necessary supplies and personnel and also to his enthusiasm and use of data to prove they were being successful. The principal at urban school B, on the other hand, told researchers that he did not have time to be involved in the reading program so the district reading specialist was in charge. Students at urban school B were not showing similar gains in reading achievement as students at urban school A during the same period of time reported in the study (Venezky & Winfield, 1979).

In an ethnographic study of schools in Vermont, Mosenthal, Lipson, Torncello, Russ, and Mekkelsen (2004) found leadership to be one of the components of schools that had experienced more success with reading instruction than their companion schools. Two successful schools from each of 3 demographic clusters (rural, small, and poor; small-town
middle income and large-town, well-to-do schools) were studied during the 1998-1999 school years. To be successful, at least 80% of students in grades 2 and 4 had performed at or above state standards in reading on the Vermont Developmental Reading Assessment (DRA-VT) and the New Standards Reference Examination (NSRE). Findings were compared to 3 schools in each cluster that were identified as less successful. Less successful schools had 60% of students scoring below the state standard. Observations and interviews were performed in the schools, and formal and informal interviews were also conducted with staff members. While this sample is more homogeneous than others and is not ethnically representative of the African-American student population being studied, the findings from this study were consistent with others that have been conducted in ethnically diverse settings. Researchers found 4 common themes among the 6 successful schools, of which one theme was the importance of administrative and curricular leadership in literacy. This study also found a lack of leadership to be a contributing effect in schools that were characterized as unsuccessful.

**Indirect Effects**

Practicing school administrators would probably not be surprised that the literature does not appear to support a direct link between principal behavior and student achievement but does seem to indicate there are indirect effects that are critical to a school’s progress in meeting student achievement needs. A literature review of 40 articles detailing quantitative research methodology regarding principal impact on school effectiveness found no links or only weak links when studying direct impact on school effectiveness. However, when mediated effect models were analyzed, principal leadership consistently was found to be a mediating effect, and the authors of the literature review concluded that principals exercise a measurable, although
indirect, effect on student achievement (Hallinger & Heck, 1998). Most administrators would probably agree that their greatest impact is felt by influencing others, notably classroom teachers, to act in concerted efforts toward achieving school improvement. Hallinger and Heck (1998) conclude that the influence of the principal is felt primarily through shaping the direction of the school by establishing and staying committed to a vision. Another review of literature on school effectiveness, which included both qualitative and quantitative methods, suggests that schools in the early stages of improvement processes need strong leadership in order to move the schools along. As schools become more successful the leadership can be distributed among others (Muijs, Harris, Chapman, Stoll, & Russ, 2004).

Data collected by Hallinger, Bickman, and Davis from 87 elementary schools in Tennessee seem to confirm the finding that the principal’s effect on school improvement is significant, but indirect. Schools that participated voluntarily were part of the Tennessee School Incentives Improvement Program study. Principals and 1,300 teachers completed questionnaires relating to school factors. School effectiveness was measured by use of a criterion referenced state pre- and post-test in reading, and gain scores were regressed based on the pretest level. Researchers found no evidence that principal leadership directly impacted student achievement but did find a statistically significant positive relationship between leadership and a clear school mission, which in turn, influenced student opportunity to learn and teachers’ expectation for achievement, factors which had a positive effect on student achievement (1996).

Direct Impact of Principal Leadership

While many studies have documented the indirect influences of administrative leadership, some have pointed to explicit behaviors that appear to have positively motivated
schools toward higher levels of achievement. In a study of 13 school systems, using pairs of schools labeled as effective and ineffective based on performance at or below predicted grade levels on 3rd grade reading achievement tests, Teddlie, Kirby and Stringfield (1989) found that the behavior of the principal impacted the achievement of the school. After the initial data were collected, a more in-depth analysis of one pair of schools found that the principal of the effective school was “the central figure who guarded the integrity of the classroom” (p. 234). In that effective school, the principal frequently visited classrooms, actually taught in some, and was aware of innovations that were being implemented in the school. On the other hand, the principal of the ineffective school was never observed during 6 days of observation entering a classroom, was unaware of discipline problems throughout the school, and did little or nothing to minimize classroom interruptions.

A meta-analysis of 70 studies on leadership culled from a potential field of 5,000 studies found a direct and substantial impact of principal leadership on student achievement. Many of the 70 studies were doctoral dissertations, although a few were peer-reviewed articles. This meta-analysis, sponsored by the Mid-Continent Research for Education and Learning organization, found the average effect size for leadership behaviors on student behaviors to be .25. Twenty-one attributes or behaviors of leadership were identified as contributing to student achievement, with effect sizes ranging from .15 to .33. Probably equally compelling is the conclusion that some leaders can have as much of a negative impact on student achievement as other leaders have a positive impact (Waters, Marzano, McNulty, 2003).

Teacher efficacy, or the personal feeling of effectiveness, also appears to be influenced by principal leadership. In their study of 137 elementary school teachers randomly selected from 37 elementary schools in New Jersey, Hoy and Woolfolk (1993) found that 2 aspects of
organizational life affected teachers’ efficacy: principal influence and academic emphasis. When teachers believed that principals had influence with their superiors and were able to eliminate barriers for the teachers, their own sense of efficacy was positively impacted.

In yet another study related to teacher efficacy, Hipp and Bredeson (1995) found that 3 elements of principal leadership appeared to impact teachers’ sense of general and personal teaching efficacy. Their study of 10 middle schools undergoing change initiatives found that a principal modeling behavior, inspiring group purpose and providing contingent rewards appears to positively impact the sense teachers have of their ability to impact student achievement. A group made up of 280 teachers and 10 principals provided data for their study into the behaviors that are most likely to make a difference in teachers’ sense of personal and general efficacy.

A study of the working conditions of North Carolina teachers, prepared for the governor, found that teachers ranked leadership as one of the top reasons for deciding whether or not to stay at a particular school. Survey responses were received from 34,000 educators, representing 90% of the schools in North Carolina. Twenty-seven percent of the teachers who responded indicated that leadership was a critical element in determining whether they stayed at their current school, surpassed only by the desire for a collegial atmosphere, which was most important to 34% of those surveyed (Southeast Center for Teaching Quality, 2004).

While the relationship between the influence of the principal and student achievement has not always been strongly established in research, there appears to be consistency in the belief among some researchers who have made school effectiveness an area of study that the principal is a critical link in school achievement efforts. Reynolds and Teddlie (2000) reviewed 2 studies from the United States, 3 from the United Kingdom, and 1 from Australia; all of the studies are referred to as classics in school effectiveness research. Reynolds and Teddlie, who have been in
the forefront of school effectiveness research for at least the past decade and a half stated, “We do not know of a study that has not shown that leadership is important within effective schools” (p. 141).

Others, however, are more skeptical of this broad generalization. In a review of the literature on principal impact on student achievement or school effectiveness, Zirkel and Greenwood (1987) made the argument that there was little consensus among researchers about the principal’s influence on school effectiveness. However, even these critics acknowledge the need for balance in determining the issue. While criticism of the importance of the principal’s role does exist, it appears that the preponderance of evidence supports the necessity of strong leadership. The expectation is that the effective schools in our study also will have principals who exert positive influence on the academic performance of the school.

Improving Schools Benefit from Strong Leadership

A study commissioned by the National Commission on Education in Great Britain focused on case studies of against the odds schools in disadvantaged areas. One of these against the odds schools was Burntwood Secondary Girl’s School, formed by the combination of 2 neighborhood schools in 1986. About 70% of the families at the school were from minority ethnic backgrounds, and one-half came from economically disadvantaged areas. One-third of the students were eligible for free meals, and 40% of the student body spoke a language other than English. Researchers qualified this school as successful due to General Certificate of Secondary Education results above the national average, very low average absence rates, and higher than average participation in further education. Observations and reports from respondents indicate that the leadership exhibited by the principal had been critical to the success of the school. Study
authors found that “the determination of a respected leader to push the achievements of the school to the maximum appears to …also be a major factor in the success of the institution” (Mortimore, Davies, & Portway, 1996, p. 164).

Reviewing 11 case studies for a British government sponsored National Commission on Education analysis, Maden and Hillman (1996) found that the vision of the principal was a “pervasive and influential force” (p. 339) even though the personality of the principal may not be commanding. The ability to possess, share and inculcate a vision for school achievement was observed in all eleven school heads.

A 2003 study of schools in the implementation phase of a state wide effort at improving school achievement also confirmed the principal’s importance to school improvement. While no evidence of achievement scores were presented, researchers Johannesen-Brock and Groth studied 54 schools, which were identified as highly impacted because of the percentage of students who were economically disadvantaged, the percentage of ethnic minorities, students who were English language learners, student mobility rates, and single parent households. The state provided additional funding for these highly impacted schools, and the study was a longitudinal look at the effectiveness of implementation of school improvement plans. The commitment of the principal was found to have a direct effect on the school improvement plan. In fact, when the principal was involved but not leading, there was less commitment to the plan for improving student achievement.

*Use of Data to Inform Instruction*

In the era of federal legislation requiring each school to make adequate yearly progress, a focus on student data has become more of an expectation for schools than ever before. A review
of existing literature reveals that schools effectively utilizing data to analyze instructional weaknesses and making necessary changes will be more effective than schools that are not effective with this practice. Edmonds (1986) listed the use of data as one of the practices he identified in his research of effective and ineffective schools. Personnel in effective schools focused on results of testing to change instruction when necessary, while teachers and administrators in ineffective schools excused the results. In their study of schools that exceeded expected performance, Venezky and Winfield (1979) also found that careful monitoring of student progress was present in effective schools and lacking in ineffective ones.

Reviewing the literature on school improvement, Muijs, Harris, Chapman, Stoll and Russ (2004) found that strategies do exist for schools facing challenging circumstances, and one of those strategies is creating an information-rich environment. The authors define data-rich schools as “continuously interrogating existing test data to see whether initiatives are working, whether there are problems with achievement in particular areas or with particular populations” (p.158-159). They state that data-richness is an element that appears to characterize improving and effective schools.

A study of 54 “highly impacted” schools found that schools fell into 3 categories based on their approach to impacting student achievement. Type I and II schools believed that they could have an impact on student achievement, while Type III schools did not hold that same belief. Type I schools exhibited a set of common characteristics, which included continuous monitoring and evaluation of programs and student achievement (Johannesen-Brock & Groth, 2003). The focus of this study was on the process of implementing change, and Type I and II schools were able to transform their schools in more substantial ways than Type III schools.
However, because of changes in test designs and study limitations, direct links to student achievement among the 3 types of schools were not provided.

Strahan (2003) found that teachers and administrators had developed procedures for holding data-directed dialogue about school improvements when a 3 year study of improving low income elementary schools was conducted in North Carolina. These schools were classified as *beat the odds* schools because of improvements on their state achievement tests in spite of serving students that do not traditionally perform well on such tests due to ethnicity and economic status. Teachers described the process of improvement as beginning with the identification of areas of needed improvement and then using data from formal and informal assessments to target areas for instructional improvement.

*Impact on Student Achievement*

A case study of an elementary school that had improved student achievement over a period of several years found that teachers and administrators in that school had developed procedures for holding “data-directed dialogue” about school reform and student achievement that guided grade level planning and staff development efforts. Sixty-six percent of the students at this elementary school were on free and reduced lunch, and in 1997 only 49.4% of the students in grades 3 through 5 were proficient on state reading and math assessments. By 2002, 74.6% of the students in the studied grades were at proficient in both reading and math. Researchers found that the staff’s use of data had been one of 3 major changes in school culture over the period of time that saw such dramatic gains in student achievement (Strahan, Carlone, Horn, Dallas, Ware, 2003).
Symonds (2004) compared 2 groups of schools in the San Francisco Bay Area. Thirty-one of the 32 selected schools had “significant” populations of African-American and Latino students during the periods studied. California defines significant as at least 100 students or 15 percent of the student population. Groups meeting this criterion are provided a subgroup Academic Performance Index (API) score. Sixteen schools were labeled gap closing and 16 were not gap closing schools, indicating their progress in bridging the performance gap between White and/or Asian students and African-American and Latino students. In the gap closing schools, students in the low-performing subgroup made nearly twice the amount of gain as the high-performing groups during a 4 year period from 1998-2002. The 16 non-gap-closing schools showed opposite result patterns: students in the White and/or Asian population made 2 ½ times the growth of the African-American or Latino students. Researchers sent surveys to 96 teachers, and received an 85% response rate. Follow-up on site investigations were made to 3 study sites to gain further perspective on the characteristics that were apparent at the gap closing schools. The findings from this study indicated that how schools use data can be a critical key to school improvement. Gap-closing schools assessed students more frequently and also tended to have structured time within the day to discuss the results and the steps that would be taken to improve student achievement.

Another study of 5 schools with high levels of poverty in Texas also reported on the effectiveness of data gathering and sharing in improving student achievement. One of the highlighted schools, T.W. Ogg Elementary, had a population of 61% economically disadvantaged, with 15% African-American, 57% Hispanic and 28% White students. Yet, student performance on the Texas Assessment of Academic Skill (TAAS) tests were high enough for the school to be rated at the highest level of exemplary by the state of Texas for the
years of the study (1998-2000). Teachers at Ogg assess students on a weekly basis, in addition to district-mandated benchmarks and end of the year tests. The collected data was used to identify problems for students and make changes in instruction that would help them succeed. Teachers at both 4th and 5th grades reported benefits from this frequent assessment that included targeting improvements in their own teaching that was needed to bring about mastery of the objectives and also identifying specific objectives that needed to be re-taught at the class and individual level. School leadership reported an active involvement in data collection and analysis as well (Council of Chief State School Officers and the Charles A. Dana Center, 2002).

An experimental design study that attempted to measure the impact of ongoing systematic assessment looked at 33 teachers who were divided into 3 groups: in the first group, the control, teachers were not provided assessment data on student performance; in the second group, teachers were provided data on student performance, but no outside expert help to make corrections to teaching effectiveness; the third group was provided assessment data as well as expert recommendations about instructional improvements that could be made. Each teacher picked 2 low-achieving students for the study. Analysis of the groups found a significant difference between the control and the 2 groups who were provided assessment data in the number of adjustments that were made to their instructional approach. The researchers concluded that with an ongoing assessment system in place, teachers made adjustments to their teaching plans, but student achievement was only significantly positively impacted when the data was paired with expert guidance in which instructional strategies to modify (Fuchs, Fuchs, Hamlett & Stecker, 1991). The implication from this study appears to be that data alone will not improve student performance, but data coupled with expert readjustment of instructional planning will have an impact on achievement levels.
Collecting data in order to inform and modify instruction appears to be validated by multiple research studies of effective practices in schools that are attempting to improve student achievement. However, data collection must be accompanied by analysis and adjustments to instruction to help teachers and school personnel better meet the needs of learners if it is to be an effective strategy for increasing the academic learning of students, especially those who begin school with disadvantages that hamper their potential success in school.

**Teacher Effectiveness**

A final component that appears to be important for improved achievement of African-American economically disadvantaged students is the quality of the teacher directly instructing students. Assessing teacher impact is problematic due to the difficulty of clarifying the attributes of instruction that comprise effective teaching behavior. However, the complexity of the issue has not prevented researchers from attempting to define effective teaching behaviors and devising methods of assessing their impact on student achievement. This attempt continues because research indicates that classroom factors have an impact on differences in school performance. Haycock, (1998) the director of The Education Trust, a national organization devoted to exposing the disparities in pupil achievement and forcing school improvement efforts, speculates that if minority children were provided access to teachers of the same quality as students in other schools, half of the gap in educational achievement would disappear. In a review of literature on school reform, Darling-Hammond (2000b) also asserts that unequal access to well qualified teachers, which happens because of a result in funding inequities, is “one of the most critical factors in the underachievement of African-American students” (p. 270).
In a large analysis of school effectiveness research, Reynolds and Teddlie (2000) found that studies comparing the effects of school and classroom factors seem to point to classroom factors predicting more variance than school factors. Similarly, in a meta-analysis of 16 studies that compared the relative impact of teacher versus school factors on student achievement, Luyten (2003) was able to “confirm the general impression that teacher effects outweigh school effects” (p.42) especially at the primary level, but also felt compelled to report that it failed to provide “unmistakable confirmation” (p.45) of that belief.

A study that built on previous research and used a very large data set from students in Texas also found that the impact of teacher quality had far greater influence than all other school factors. Achievement data from a cohort of students on the 3rd, 4th, 5th, and 6th grade state tests were examined from over 500,000 students from 3,000 Texas schools, and the authors estimate that at least 7.5% of the total variation in achievement gains can be explained by differences in teacher quality (Hanushek, Kain & Rivkin, 1998).

In a study that appeared to confirm the belief that African American students do not always have teachers of the same quality as other students, Kain and Singleton (1996) conducted a 5-year long project that collected data on more than 1.8 million children in Texas from 1990-1994 and represented more than 235,000 teachers. The authors considered the level of data collected to be comparable to the amount of data considered for the Coleman report in 1966, which analyzed data on 570,000 students and 60,000 teachers. The authors found that teacher ability, as measured by tests of verbal ability and written proficiency, decreased as the percentage of African-American and Hispanic students enrolled at schools increased. Conversely, teacher ability appeared to increase with the proportion of higher-income students. Other variables indicated that teachers at schools with high percentages of ethnically diverse and
A study of students in Michigan primarily designed to measure school climate and its impact on student achievement at elementary schools found evidence that there was a difference in the impact on student achievement in schools whose population was primarily African-American depending on the teachers’ “commitment to doing a good job and their perception of similar student commitment” (Brookover, Schweitzer, Schneider, Beady, Flood and Wisenbaker, 1978, p. 312). In this study, researchers constructed a student questionnaire that was administered to a random sampling of 4th and 5th grade students in the Michigan public school system, and at the same time students were completing the survey instrument, their teachers were asked to provide feedback on their own practices. There were 68 randomly selected schools representing the universe of the state. Of these, 61 were more than 50% White and represented the White SES schools, and 7 were more than 50% Black. An additional 23 majority black schools were randomly selected from the universe of predominately Black schools in Michigan to increase the sampling of majority Black schools. While not all the randomly selected schools elected to participate, over 175 teachers and 4,737 students at predominately Black schools provided data for this finding. The study found that the variable that measured teachers’ commitment to improvement and their perception of the students’ commitment to improvement made more of a difference at majority Black schools than at White schools, accounting for 13% of the variance in mean achievement (Brookover et al., 1978).

Data from the congressionally mandated study Prospects were used by Rowan, Correnti and Miller (2002) to examine the extent of teacher effects on student achievement. Two cohorts of students were studied, and variance in the students’ achievement at a single point was
decomposed, using scale scores on the CTBS reading and math tests. Researchers found that “between 12% and 23% of the total variance in reading achievement was among classrooms and that between 18% and 28% of the total variance in mathematics achievement was among classrooms” (Rowan, Correnti & Miller, 2002, p. 1528). Further statistical analysis, designed to measure the amount of improvement that had occurred during the tested year, found effect sizes for classrooms ranged from .21 to .42.

Darling-Hammond (2000) performed a review of 50 state surveys of policies, state case-study analyses, the 1993-94 Schools and Staff Surveys (SASS) and National Assessment of Educational progress (NAEP) data to identify possible relationships between teacher effectiveness and student achievement. Her review found significant correlation for teacher quality characteristics and student achievement. She defined teacher quality as holding certification and also having a degree in the field taught. Darling-Hammond also found evidence to indicate that teacher effectiveness is a stronger component of student achievement than student background factors. She asserted that those interested in improving student achievement “may be well-advised to attend, at least in part, to the preparation and qualifications of the teachers they hire and retain in the profession” (pp.37-38).

Brophy (1988) completed a review of literature regarding teacher behavior and student achievement, and stated that progress had been made in identifying those characteristics that made teachers effective. Brophy identified 4 specific categories of teaching behavior as being most consistently replicated in previous quantitative studies to be related to student success. These studies consistently found that teachers who positively impact student achievement: 1) hold high expectations for student success, are clear about their role in the process, and maximize time for academic pursuits; 2) actively teach by providing direct instruction, whether
in large or small groups; 3) allow for student success and maximize learning time; and 4) exhibit effective classroom management.

Teddlie, Kirby and Stringfield (1989) studied effective and ineffective schools in 13 school systems. Third grade scores on the reading section of the state basic skills test were examined and then averaged. School effectiveness was defined as schools whose mean scores for 2 years were above or below achievement prediction, after factors such as mother’s education, father’s profession, and racial compositions were regressed. In addition to the criterion of 2 years’ performance either above or below their predicted achievement, one year’s performance had to be substantially above or below predicted student achievement for the school to be included as a participant in the study. The final sample consisted of 9 pairs of schools, 3 each from urban, rural and urban-to-suburban systems. One pair was eliminated when it was determined that there was not a sufficient match with ethnographic characteristics between the pair. A 2 person team collected data during 3 day visits in both the fall and spring of the school year. Teddlie, Kirby and Stringfield (1989) found “clear evidence that teachers in more effective schools consistently displayed more of the effective teaching behaviors” (p.233) which they identified by such elements as time on task, high expectations, positive reinforcement, friendly ambience, and discipline.

A study of 532 Texas elementary, 198 middle school, and 97 high school campuses found that teacher experience made a significant difference in the success of the school. Researchers defined successful schools as campuses where at least 90% of the enrollment passed the state criterion referenced tests. Low-performing campuses were defined as schools where 50% or less of the students passed the state tests. These schools also fit the demographic profile of the study with economically disadvantaged students making up at least 50% of each school’s enrollment.
The researchers looked at socio-economic status (SES) and found that SES played a significant role in the performance of the school. However, they also found a significant correlation between teacher experience and student achievement. For each additional year of teacher experience, the likelihood of the school becoming a high-performing campus increased by 10.1% at the elementary level and by 28.5% for high school campuses (Tajalli & Opheim, 2004).

Fetler (1999) examined the relationship between emergency and/or alternatively certified mathematics teachers in California in order to probe the correlation between certification status and student achievement. The data indicated that the percentage of math teachers with emergency or alternative certificates was an accurate predictor of student success because higher numbers of emergency certification teachers resulted in lower student achievement scores on standardized tests of mathematics skills. Additionally, schools with more experienced teachers tended to have higher scores on the math tests.

As previously noted, part of the difficulty in measuring teacher impact on student achievement is determining what criteria will be used to evaluate teacher effectiveness. One study proposed that the quality of the teacher’s undergraduate institution would have an impact on student achievement. The hypothesis was that teachers educated at more selective universities would have better academic skills and would therefore be more effective with students. While the study did show that a larger percentage of teachers who graduated from less selective schools taught in schools high in poverty, there was no direct evidence that this relationship negatively impacted student achievement. Additionally, the level of selectivity of the universities was self-reported, so the measurement of selectivity cannot be judged as completely accurate, thereby reducing the validity of the study in assessing teacher impact on student achievement (Wayne, 2002).
Value Added Models of Effectiveness

In recent years, several attempts by school governance entities have been made to establish the effect that teachers have on students in a quantifiable way. In theory, value-added evaluations are designed to measure the cumulative impact that teachers have on students based on student performance on achievement tests. An early large-scale report came from the Tennessee Value-Added Assessment System (TVAAS). The TVAAS database contains information for Tennessee’s entire grade 2 through 8 student population, totaling approximately 3 million records. In the first phase of this study, the achievement of a cohort of students was tracked through 4 years of school. Teachers were grouped into 5 quintiles, from the lowest effectiveness in the first quintile to the highest effectiveness in the 5th. Analysis of the data showed that the average score of students who had low quintile teachers for each of 3 years of schooling was in the 44th percentile, while the average performance of students with 3 high-performing teachers was in the 96th percentile. The authors asserted that students assigned to more effective teachers have a decided advantage in attempting to achieve academic gain (Sanders & Rivers, 1996).

A similar value-added model designed by Dallas Independent School District researchers Babu and Mendro was used to compute teacher effectiveness using scores from the reading and math TAAS tests and the reading and math portions of the Iowa Test of Basic Skills (ITBS). The population of students analyzed totaled over 14,000 for the reading cohorts and over 17,000 for the math groups and represented students from all ethnicities and from grades 3 through 8. Results of the analysis indicate that while the effect size was smaller than in previously done studies, statistically significant differences were found between cohorts of students who had 3
years of effective teachers, defined as those in quintiles 4 or 5, and cohorts of students who had 3 years of ineffective teachers, defined as teachers in quintiles 1 or 2. For example, 100% of third grade students in 2000 who had been assigned to a quintile 5 teacher for all 3 years passed the TAAS test. Conversely, the cohort of 3rd grade students who had teachers in quintile 1 for all 3 years had a passing rate of 36.84% for that year (2003).

However, this model of value-added design has drawn criticism for design flaws from several quarters. Fisher (1996) the director of student assessment for the state of Florida, was contracted to conduct an analysis of the TVAAS system by the Tennessee legislature in an effort to counter objections to the assessment program. Fisher’s observations included concerns over the lack of auditing for teacher and student information inputs that are critical for the evaluation pieces of the process, problems with data interpretation, and the complexity of the system leading to a lack of understanding by most citizens as well as legislators. He notes that the value added statistical methodology is purported by the author of the system to control for all other factors in the lives of students, but he disagrees that this can be done effectively. Fisher concludes by recommending against the use of the value-added system at the classroom teacher level.

Kupermintz (2002) questioned the empirical basis for the use of such a value-added model. He notes that value-added methodology is being used frequently as states attempt to design accountability structures, but notes the lack of peer review of the studies that have been conducted and widely quoted. Kupermintz also questioned the claim made by value-added proponents that student variables outside of school can be factored out of performance results using the value-added model, pointing to weaknesses in the statistical design of the research.
Effectiveness Known but Not Quantified

Community perceptions of school effectiveness are influenced by beliefs about teacher effectiveness, as evidenced in a comparison study of schools in the U.S. and Australia. A total of 427 schools in Australia and 573 in the U.S. were studied, with data recorded from the principal, 3 teachers, 3 parents and 3 students in the secondary schools. In both countries, a “dedicated and qualified staff” was identified as being the element given the highest priority for community members in determining an effective school (Townsend, 1997).

While assessing the specific behaviors that may characterize effective teaching is problematic, the literature appears to support the theory that teacher behavior and effectiveness does positively impact student achievement. In a study designed to measure the impact that specific teaching behaviors had on student achievement, Murnane and Phillips (1981) concluded that while it was impossible to identify specific behaviors that explained differences in teaching behaviors, it is possible to conclude that what effective teachers have in common is an ability to discover techniques that fit the needs of the particular children in their classes. In other words, effective teachers find the subtle interaction effects that researchers agree are so important in explaining teaching effectiveness, yet are so hard to find. Experienced teachers and more able teachers are effective because they are most successful in the search for techniques appropriate for their students (p. 98).

This apparent loss for a scientific reason into what makes a teacher effective would not be surprising to practicing administrators who intuitively know the power and impact effective teachers have on students’ lives. Brophy (1988) noted that it is obvious that teaching is a complex task, and therefore it is understandable and even to be expected that the knowledge about teaching effectiveness would be built on a large number of small correlations rather than
large correlations of a small number of factors. Murnane and Phillips (1981) rationalize that attempting to quantify teacher behavior as a product-process function is flawed because student characteristics that drive teaching behavior are largely unobservable. Their research seemed to indicate that “effective teachers discover the techniques that work with children, by a search process, characterized by trial and error” (p. 99).

It is difficult, if not impossible, to narrowly define and measure the behaviors that make a teacher effective with students. However, that does not nullify the observations and belief that some teachers are more effective than others in teaching hard to reach students. It is the expectation that schools that have had greater success with economically disadvantaged African-American students will indicate greater teacher effectiveness than those schools that have not had success with similar students.

Summary

African-American students who are also economically disadvantaged face difficulties in school systems that are primarily designed for and maintained by middle-class European-Americans (Kunjufu, 2002; Hale, 2001). Student progress toward equality of performance has increased, but the gap between African-American students and their White or Asian peers remains significant (United States Department of Education, 2003 and 2003b). With the advent of federal mandates such as No Child Left Behind and state legislation designed to place pressure on schools for improving achievement of sub-populations, it is critical for school administrators to investigate the factors that can be utilized to improve the performance of African-American economically disadvantaged students.
In this chapter, evidence has been presented that student teacher relationships can positively impact the performance of African-American students. In addition, research points to the importance of high expectations among all school staff for students as another critical factor in the success of some schools with high populations of African-American students. Principal leadership is also cited as a necessary component, for without the vision and foresight from the school leader to plan for student needs, schools often are unable to achieve the kind of progress needed for making instructional gains for African-American economically disadvantaged students.

In recent years, educators have become more aware of the need to utilize data to determine how to modify instruction in order to reach all students, but especially for those who may not be successful initially. Research on schools that effectively use data to benchmark student performance and then analyze the data for trends that can point to areas of strength or weakness has been presented to show the importance of this function in improving school performance for this subpopulation of students. Finally, the effectiveness of teachers was examined. Studies and data were provided to highlight the importance of the classroom level instructor in positively mitigating outside influences for African-American economically disadvantaged students.

The focus of this research now turns to the methods used to examine successful and unsuccessful school practices and beliefs. The selection and characteristics of schools that were studied are explained and details of the study design are presented. In addition, the statistical methods that were utilized to examine survey responses are explained. In-depth interviews were analyzed to uncover patterns and trends that may further explain the differences between successful and unsuccessful schools with high enrollments of African-American and
economically disadvantaged students, and the process for recording and analyzing that information is also detailed.
CHAPTER 3

METHODOLOGY

Introduction

Chapter 1 detailed the achievement gaps between minority economically disadvantaged students and white students, as well as the current environment of high stakes accountability for public schools. These issues point to the need for a focused search for school behaviors that will support the improvement of African-American economically disadvantaged students’ academic achievement as measured by criterion referenced state-mandated tests. Chapter 2 reviewed the existing literature to provide a theoretical basis for the exploration of linkages between teacher-student relationships, high expectations, the use of data, principal leadership, teacher effectiveness and student performance.

The purpose of Chapter 3 is to detail the methods that were utilized to investigate the theorized links between the performance of African-American students and teacher-student relationships, high expectations, principal leadership, use of data, and teacher effectiveness. The research questions and hypothesis are explained, along with the context of the research, participant selection, development of the instrument to be used, procedures followed, and the data analysis.

General Perspective

This study incorporated elements of both quantitative and qualitative research. Initially, analysis of participant response to a survey instrument was performed. Significance between the successful and unsuccessful schools was examined based on responses to items in a survey.
instrument through the use of a factor load analysis followed by an independent t-test for significance of sample means.

In addition, the study consists of in-depth interviews with 4 principals from high-performing schools and 4 principals from low-performing schools. Questions were written to obtain more complete information on practices at each of the 2 types of schools. After these in-depth interviews were conducted, each interview was transcribed and data-coded in order to identify common themes and patterns. It is believed that this more in-depth interview process allowed for additional insight into practices in the 2 types of schools, and provided a rich source of information for explaining the different academic outcomes between schools with similar student populations.

Research Questions

The research question that guided this study was: Do teacher-student relationships, high expectations of students, principal leadership, the use of data to impact instruction, and teacher effectiveness affect student achievement? The hypotheses that shaped the research and design were as follows:

1. There will be no statistically significant difference in principals’ perception of the importance of student teacher relationships between effective and ineffective schools for African-American economically disadvantaged students.

2. There will be no statistically significant difference in the perceived importance of academic expectations between principals in effective and ineffective schools for African-American economically disadvantaged students.

3. There will be no statistically significant difference in the perceived importance of principal leadership between principals of effective and ineffective schools for African-American economically disadvantaged students.

4. There will be no statistically significant difference in the perceived importance of the use of data between principals of effective and ineffective schools for African-American economically disadvantaged students.
5. There will be no statistically significant difference in the beliefs about teacher effectiveness between principals of effective and ineffective schools for African-American economically disadvantaged students.

Research Context

This study examined the differences or similarities in perspectives about school practices of school principals primarily from an urban school district in the Southwest. In the initial data collection process 16 academically successful and 39 academically non-successful schools were surveyed based on TAKS data from the spring 2004 testing information. Due to poor response rates from the first group, a second round of surveys was sent out when the testing information was reported for spring 2005. This additional data provided another 14 schools that met the criteria for the study. In addition, 1 school that met the criteria but was from outside the district was included.

The opinions measured were those relating to several factors hypothesized to be critical to the success of schools with higher than average populations of African-American economically disadvantaged students. These factors include the importance of teacher-student relationships, high expectations, principal leadership, the use of data for instructional direction and teacher effectiveness. A data reduction analysis produced entirely different categories than had been anticipated, with the statistical analysis showing 8 factors that explained approximately 70% of the variance between responses. Subsequent to this factor analysis, an independent t-test for sample means was conducted to determine the significance of difference in mean responses for each of the 8 factors between the low and high-performing schools.

A smaller sample of 4 principals from each group was interviewed in a structured interview format. Principal responses were transcribed, and data were coded and sorted for patterns that might reveal insight into behaviors and beliefs from each group of schools.
Survey information and follow-up interviews were conducted in the summer, fall, and winter of 2005. Testing information was obtained from the spring administration of tests in 2004, and later expanded to include testing information from 2005 as well. The inclusion of a 2nd round of schools showed that some schools continued to maintain their place on the list, some schools’ performance changed so that they were no longer included, and some additional schools could be added to the study. One school even moved from low-performing to high-performing based on the study criteria from spring 2004 to spring 2005.

Participant Selection

A thorough review of the state Academic Excellence Indicator System reports for a large urban district in the north central region of a southwestern state was conducted. This large urban district was selected after a preliminary search of suburban districts did not yield significant numbers of schools meeting the ethnographic criteria. Schools whose population of both African-American students and economically disadvantaged students was equal to or greater than the state averages of 14.3% and 52.8% for 2004 respectively were sought. This search yielded 92 schools that met the criteria for representative populations. Next, schools were sorted by their state rating of exemplary, recognized, academically acceptable, and academically unacceptable, which yielded 2 groups of schools for comparison: 33 schools that were rated exemplary or recognized, and 59 schools that were rated academically acceptable or academically unacceptable. Closer analysis of these 2 groups revealed a wide range in performance among these classifications, so a more detailed analysis of the performance of 5th grade students at each of the schools was performed. The rationale for choosing 5th grade was that historically, on the state mandated criterion referenced test, performance for 5th grade
students on both reading and math tests is lower than that of students in grades 3 and 4. Therefore, the performance of students at grade 5 should be strong indicator of the school’s academic performance.

This subsequent analysis yielded some interesting results in that schools previously identified as successful through the use of the state ratings did not continue to stand the scrutiny of this more stringent test. The passing rate for both math and reading for African-American and economically disadvantaged students at the 5th grade level was compared to the state average, and schools whose performance in both categories met or exceeded the state average for each test were then classified as high-performing.

Due to the different configurations of schools in this particular district, i.e., some schools are pre-kindergarten through grade 3 only, others are Kindergarten-6, and some are grades 4-6, several of those originally included in the group for comparison were no longer included in this sample because they did not include results for grade 5. This more careful scrutiny and stricter parameters yielded only 16 schools that met the criteria for success now defined as passing rates on 5th grade TAKS math and reading at or above the state averages for African-American and economically disadvantaged students. Next, the data were sorted by schools that had passing rates below the state average in the 4 categories of African-American math and reading and economically disadvantaged math and reading. This sort produced 39 schools whose scores were below the state average in all 4 categories. The following table indicates the average passing rates for different student groups on the TAKS test for spring 2004:
Table 3.1

Spring 2004 State Average Passing Rates for Fifth Grade Students

<table>
<thead>
<tr>
<th>Subpopulation</th>
<th>Reading</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>71</td>
<td>69</td>
</tr>
<tr>
<td>Economically disadvantaged</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>White</td>
<td>91</td>
<td>91</td>
</tr>
<tr>
<td>State average of all groups</td>
<td>80</td>
<td>82</td>
</tr>
</tbody>
</table>

Source: TEA Comprehensive annual report to the Texas Legislature on Texas Public Schools, January 2005.

Due to the low number of original surveys returned, a search was made for additional schools outside the original district that would meet the criteria for student population as well as performance. As a result, 1 school outside of the urban district is also included in the quantitative and qualitative sections of the study.

Instruments Used in Data Collection

As the direction of the research became clear, a search was made for existing instruments that might be available to measure the desired school factors. However, no existing surveys were located that contained all 5 aspects that were identified through the review of the literature as being important to the success of African-American economically disadvantaged students. Therefore, a survey instrument was constructed utilizing information gained during the literature review. The survey was designed to measure principal beliefs about their school practices in the 5 identified areas. A total of 60 questions were written for the 5 categories that were under examination. Questions were based on information gathered during the literature review portion of the research and were designed to measure specific aspects of each of the 5 categories. Participants in the pilot survey were asked to respond to each of the 60 statements on a 4 point
Likert type scale, with responses ranging from strongly agree to agree, then disagree, and finally to strongly disagree.

The review of literature regarding student-teacher relationships yielded several studies that pointed to the importance of teachers caring for students. Therefore, questions were designed to measure principals’ perceptions about teachers’ relationships with students, such as “Teachers in our building value relationships with students” and “Most classroom environments would be described as warm and supportive.” Questions about relationships between teachers and students attempted to capture teacher behaviors that indicated an investment in students above and beyond the classroom academic environment. This is supported in part by observations from African-American scholars such as Hale (2001) who states that school reform must focus “on the relationship between teacher and student - the basic building block of education” (p. 9).

Questions regarding high expectations and instructional focus were somewhat easier to construct. These items included references to teachers’ expectations of students, themselves and their colleagues, and also parent and community expectations. Additional questions were asked to determine whether teachers in the building used student background as excuses for lowered performance, as much of the literature pointed to the fact that schools with high achievement levels consistently refuse to make excuses for student failure. Brookover and Lezotte (1979) found this result in their study of 8 schools, 6 that were improving and 2 that were declining. In the declining schools there was a consistent belief among the administrators and teachers that students were not able to do well in school. In improving schools, however, respondents felt that all their students could master basic skills.
Principal leadership items were written to reflect practices that are commonly associated with effective instructional leader behavior such as familiarity with curriculum, instructional practices, and focus on instructional issues rather than administrative duties. Examples of questions include, “When I walk into a classroom, I can determine if the strategies being used are appropriate for the grade and subject being taught” and “Teachers in our school see me in the classroom at least once a week.” These items have their origin in findings such as that reported by Teddlie, Kirby and Stringfield (1989) where effective principals exhibited behavior that included visibility and involvement in instructional planning. Other questions were included to measure leadership beliefs in areas such as the need for continued staff development.

The use of data to influence instruction has received extraordinary attention in recent years, especially with the emphasis in the No Child Left Behind Act on research based school improvement efforts. The completed review of literature found examples of schools that have effectively used data to improve student achievement results, and questions were constructed to reflect practices reported in those studies. Some examples of questions that were asked about data analysis include, “Teachers in my building struggle with analyzing student achievement data” and “Teachers frequently access and utilize data in planning instruction.” In schools that effectively used data for improving school performance, teachers were reported to be comfortable with the use of data and frequently used the information to analyze instructional practices (Symonds, 2004).

Teacher effectiveness was the last school factor studied. There are inconsistent and inconclusive hypothesis as to the elements of teaching that can best predict teacher success. Some studies have reported a relationship between student achievement and teacher certification, while some have looked at teacher behaviors in the classroom and others have examined the
importance of experience. Questions for this section were written to address some of these facets of teaching behavior, including experience, certification, ratings on appraisal systems and collaborative actions with other faculty members. Reynolds and Teddlie (2000) reported a finding from the Louisiana School Effectiveness Studies that in low SES, ineffective schools, 21% of teachers wanted to teach elsewhere. However, only 12% of the teachers in low SES effective schools wanted to teach elsewhere. Therefore, a question was constructed to address this finding: “Due to their expertise, teachers in our building could move to other schools with fewer educationally disadvantaged students but choose to stay at our school.” Believing that most people want only the best for their own progeny, a sample item asked principals to respond to this item: “I would gladly have my own child or grandchildren taught by teachers in our building.”

Questions were also constructed to explore issues at greater length with a small sub group of administrators. Structured interviews were scheduled with 8 participants, 4 from the low-performing group of schools and 4 from the high-performing group of schools, in order to gather additional information that might assist in providing information as to school factors that impact the performance of African-American economically disadvantaged students.

*Procedures Used*

In order to measure reliability, a pilot study of the survey instrument was conducted with schools having the same characteristics as the subject schools. These schools were identified first by confirming that student enrollment percentages met or exceeded the state average for African-American and economically disadvantaged students. Next, pilot sites were confirmed to have
passing rates that were either all above the state average on the 5th grade math and reading tests for both sub populations, or all below the state averages.

First round participants in the pilot study were mailed the survey along with the consent form and provided a stamped, self-addressed envelope with which to return the survey. 62 pilot surveys were mailed to schools across a Southwestern state, and 14 were eventually returned. A copy of the letter accompanying each of the pilot study surveys is included in Appendix A.

Approximately a month after the initial pilot survey was sent, another group of pilot surveys was sent to additional principals of schools meeting the ethnographic and passing criteria in an effort to increase the number of pilot surveys received. Second round pilot study participants were sent email messages with links to an on-line survey site embedded in the email, with a request for their help in piloting the survey. Eventually, a total of 28 responses were received and used for the reliability tests.

A Cronbach’s coefficient reliability test was administered to the completed pilot surveys in order to determine reliability (Gall, Gall, and Borg, 2003). Cronbach’s alpha is a less conservative estimate of reliability than a test/retest method, but is widely used for test reliability. The survey was divided into the 5 categories of school practices being examined, and an alpha coefficient for each section was determined. Items that affected reliability standards or did not appear to provide sufficient correlation with other items in the examined category were eliminated. The elimination of some items resulted in a final survey instrument of 49 questions, with at least 9 questions in each category and alpha reliability levels that ranged from .83 to .95.
Table 3.2: 
*Cronbach’s Alpha Test for Item Reliability.*

<table>
<thead>
<tr>
<th></th>
<th>Number of questions for final study</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student teacher relationships</td>
<td>10</td>
<td>.95</td>
</tr>
<tr>
<td>Principal leadership</td>
<td>9</td>
<td>.84</td>
</tr>
<tr>
<td>High expectations</td>
<td>11</td>
<td>.91</td>
</tr>
<tr>
<td>Use of data</td>
<td>10</td>
<td>.85</td>
</tr>
<tr>
<td>Teacher effectiveness</td>
<td>9</td>
<td>.83</td>
</tr>
</tbody>
</table>

Content validity for the instrument was improved by seeking input from 4 experts in educational administration and school culture, who reviewed each item to insure that it would be clear to participants, and also that it would yield the requested information. Content validity experts included 2 elementary school principals with advanced degrees, an executive director of elementary instruction who supervises elementary principals, and a district superintendent. Changes to the survey instrument were made in order to clarify items that were unclear to the content validity experts. These changes resulted in questions assumed to be more explicit and clearly understood by participants. The review process typically resulted in changes to words or phrases to increase clarity without interfering with the intent of the items.

Fifty-five schools initially met the criteria for number of African-American, economically disadvantaged students enrolled as well as passing rates on the state mandated criterion referenced tests for 5th grade math and reading. After the public release of the 2005 testing information, an additional 13 schools met the criteria for the study. Institutional Review Board approval of the study, as well as approval from the urban school district where the 68 schools are located, was obtained before any contact was made with subject administrators. Copies of the application for school district approval are included in Appendix B. Copies of the letter sent to participants are included in Appendix C. Participants were told that the study was
designed to investigate factors that might affect the performance of African-American economically disadvantaged students. As little information as possible was given to participants about their selection for the study. If necessary, the explanation provided was that student enrollment met the criteria for the study guidelines. Confidentiality was assured, as well as availability of the results at the end of the study.

After establishing reliability data and obtaining district and IRB approval, surveys were emailed to the 55 principals of identified schools using a 3rd party survey collection entity. This collection process allowed for an immediate response, and also provided convenience for both respondents and researcher. However, 2 factors contributed to difficulty in obtaining survey responses from the identified schools. One was that several of the schools had been assigned new administrators, who were not able to answer questions about either the 2004 or 2005 school year. Some recently reassigned administrators did respond to survey questions in reference to the school they had just left. The other complication was the busy schedule of most school administrators. Repeated phone calls and emails were sent, and eventually 14 responses were received. After some period of time had elapsed with an insufficient number of responses, a paper mailing was made to the first round of schools. This produced another 7 survey responses, which still did not provide an adequate survey sample. When the AEIS data for 2005 were released, the data were combed in order to find new schools who might qualify as having higher or lower test scores than the state average for 2005. An additional 13 schools were found, for a total of 68 schools. However, of the 68 schools that qualified for the study over the 2 year period, 14 of them were unable to be surveyed due to administrator reassignments, retirements or resignations. The eventual response of 30 surveys out of 54 provided a response rate of 56%.
These 2 groups served as the comparison groups for examination of principal responses to survey questions. In addition, structured interview questions were written to be asked of the 8 participants during 1 hour interviews. Tape recordings of each interview were made and transcribed. Notes that recorded interview details and other information were added and all the information gathered was sorted and categorized. This data yielded information regarding themes and patterns that provided insight into practices at the selected schools that may impact African-American student performance.

**Quantitative Data Analysis**

Data received from the schools were entered into a spread sheet and identified by school number. Numerical values for each question were assigned to each of the Likert responses, i.e., strongly agree was equal to 1, agree was equal to 2, disagree was equal to 3, and strongly disagree was equal to 4. Questions that were worded negatively were reverse coded when the analysis was completed so that numerical values remained consistent.

A factor load analysis was completed for the 49 questions asked on the principal survey. While questions had been written to fall into one of 5 areas of the school experience, a factor analysis was completed to determine where the questions statistically clustered together. The results did not mirror the proposed 5 groups. Instead, the best and most logical grouping arrangement yielded 8 factors, which explained 70.278% of the variance between responses.

After the factor analysis was completed, the 2 groups of schools were identified as either a value of 1 which equaled a high performing school, or a value of 2, equaling a low performing school. The questions were grouped into the factors identified in the data reduction analysis, and
an independent sample t-test was conducted for each factor, comparing the responses of the low and high performing groups to each other.

Qualitative Data Analysis

Questions were written to explore principal perceptions and behaviors in greater depth than possible with a short survey. Survey response to “Teachers in our school provide students with emotional support” might trigger an open-ended question such as, “What types of evidence do you see of teachers providing emotional support for students in your school?” The variances between responses for each of these and similar questions provided insight into the practices and beliefs of the interviewees. Questions used in the in-depth interview can be found in Appendix D.

Questions for this portion of the process were designed to be open-ended, without being leading. It was important to maintain neutrality in preparing the questions, so that no indication was given of the anticipated response. Also important was the ability to judge whether to allow the interviewed administrator to talk freely when it appeared s/he has strayed from the topic. Important thoughts often arose out of this type of discourse, but the divergence sometimes made it difficult to obtain information from all participants that illuminate differences in perceptions about similar issues, especially given the time constraints of urban elementary principals. Glesne and Peshkin (1992) indicate that this decision requires thoughtful juggling of desired outcomes, because interrupting a respondent’s free flow of conversation might damage the rapport that has been established, but allowing very loquacious individuals to get off subject can be counter-productive for both parties.
Another component for managing data from interviews held can be a daily summary. While tape recordings were made of the interview sessions, Gall, Gall and Borg (2003) recommend committing any remembered piece of information to written form soon after the interview is completed. The notes often include observations about sights, smells, sounds, impressions, and feelings obtained during the interview, and might even contain sketches or other means of memory enhancement. These observations can be added as a review is made of the tape recording, providing richer context to the spoken words. Notes about schools for this study often included comments about procedures that were apparent, maintenance of the building, demeanor of the staff, and even behaviors that contradicted those reported by the administrator. In addition, when possible, a photo was taken of the building in order to serve as an additional visual reminder of the setting.

Glesne and Peshkin (1992) also recommend establishing a system of analytic files that can be organized in a variety of means, and also developing coding systems to help make sense of the data. These coding systems are typically developed during the data gathering process, as themes and patterns begin to emerge. This early stage of data analysis coding is followed at a later point by more sophisticated data coding, essentially a process of categorizing and then finding subcategories of information. These categories and subcategories become a framework for the organizational flow of the material, providing structure to the data collected in order to write about the information gathered in a cohesive way.

For this study, a transcription was made of each interview so that comments were captured verbatim. The first step in organizing the data was to group the principals’ comments into one of the 5 factors of questions, which was done in a table format. After continued review of these tables, subcategories of information became more apparent, and the tables were further
coded with a breakdown of the primary category. A summary of the data coding that was established for each category is provided in Appendix E.

Summary of the Methodology

To summarize, this analysis began by identifying schools that were more or less successful with African-American students who are economically disadvantaged. A survey was developed in order to measure school principal’s responses to statements relating to each of the categories hypothesized as impacting African American economically disadvantaged student performance: student teacher relationships, high expectations, principal leadership, the use of data, and teacher effectiveness.

Comparisons were made between schools in the 2 categories in order to identify patterns that may be present in some successful schools but are not present in unsuccessful schools, or vice-versa. It is hypothesized that the analysis of the differences between these schools will add to the knowledge base of characteristics that make some schools more successful with African-American, economically disadvantaged students.

While the quantitative data provides one view of these differences, the more in-depth probing that occurred during the focused interviews provides additional insight into the practices of these 2 categories of schools. Themes that are found in either or both groups of school lend even greater strength to the information obtained in the quantitative analysis.

Chapter 4 will present the results of both the quantitative and qualitative data analysis. The statistical analysis completed of principal responses to survey questions will be shared and the significance of the findings discussed. In addition, information obtained during in-depth
interviews with principals has been categorized, reported, and summarized for the purpose of enhancing the understanding of the quantitative analysis.
CHAPTER 4
RESULTS

Introduction

The purpose of this study was to identify school factors that might positively impact the performance of African-American economically disadvantaged elementary students. The results of this study will add to the literature regarding methods that can support improved performance for this student group in Texas elementary schools.

This study was designed as a mixed methodology approach. For the qualitative portion of the study, 8 in-depth interviews were completed with principals of schools where the population of African-American and economically disadvantaged students exceeded the state average. These interviews were designed to provide a richer context for understanding the differences between the 2 groups of schools.

The quantitative portion used a 49 question survey that was e-mailed or mailed to a total of 54 principals. A total of 30 surveys out of 54 were returned, a 56% response rate. While there were a total of 68 schools initially identified as meeting the criteria for the study, several schools were not surveyed due to a change in principals between the testing year and the survey administration. Some principals who had only recently been reassigned to another school were asked to complete the survey about the campus where they had been assigned during the testing year of 2003-2004.

Twenty principals who responded to the survey had the degree of Master’s of Education (M.Ed.), 6 had other Master’s level degrees, 3 had an Ed.D. and one had a Ph.D. Their average age was 43.9, with a median age of 46. Years of experience as a principal averaged 8.3, with a range from 2 to 22 years, and median of 7.75 years. Seventeen principals were female and 13
were male. Eighteen principals were African-American, 4 were Hispanic, 7 were White, and 1 indicated “other” for ethnicity.

Due to the small sample size and hectic schedules of many administrators, it was difficult to gather information from targeted school administrators. Repeated efforts were necessary to get results to the written surveys, and eventually it was necessary to include a 2nd year of school results in order to obtain the required number of responses. Similar difficulties were encountered in trying to gain access to principals for the structured interviews.

Survey participants answered 49 questions concerning the school factors of principal leadership, teacher effectiveness, student teacher relationships, the use of data for instruction, and high expectations. Schools were divided into 2 groups, 1 group whose performance was above the state average and another group whose performance was below the state average for African-American economically disadvantaged students in 5th grade reading and math. This grade was targeted due to the historically depressed performance of students at the 5th grade level. To achieve the purpose of the study, the following research hypotheses were proposed:

1. There will be no statistically significant difference in principals’ perception of the importance of student teacher relationships between low and high-performing schools for African-American economically disadvantaged students.

2. There will be no statistically significant difference in the perceived importance of academic expectations between teachers in low and high-performing schools for African-American economically disadvantaged students.

3. There will be no statistically significant difference in the perceived importance of principal leadership between principals of low and high-performing schools for African-American economically disadvantaged students.

4. There will be no statistically significant difference in the perceived importance of the use of data between principals of low and high-performing schools for African-American economically disadvantaged students.

5. There will be no statistically significant difference in the beliefs about teacher effectiveness between principals of low and high-performing schools for African-American economically disadvantaged students.
Results of Quantitative Analysis

When the survey results were completed and compiled, a correlation test was performed in order to determine which questions needed to be reverse coded before the data were analyzed. In constructing the survey instrument, questions were written with both positive and negative language, and it was important for the correct questions to be reverse-coded. For example, question number 2 on the survey was stated negatively: “Teachers in our school rarely hug students or demonstrate affection to them.” Reverse coding would change a strongly disagree response (a 4 on the survey) to a 1 for analyzing purposes so that positive responses were all low and negative responses were all high. The correlation test served to confirm or deny whether a question should be reverse coded.

After the decisions were made about which questions to reverse code, a principal components factor analysis was completed. Gall, Gall, and Borg (2003) state that “Factor analysis is one of the most frequently used techniques in multivariate research” (p.352). The purpose of this factor analysis was to show the strength of the inter-item correlation among the questions. Questions that have a strong correlation to each other cluster in groups called factors based upon the pattern of responses to the questions from participants, reducing many variables to a few factors. The factor analysis indicated that the questions clustered in 14 categories that explained 86.843% of the variance. However, factors 9 through 14 each represented only a small percentage of the variance, ranging from 3.557% to 2.134%. The total of factors 9 through 14 accounted for only 16.56% of the variance, so the analysis was recomputed and items were forced into 8 factors. The 8 factors explained 70.278% of the variation in responses to the questions.
Table 4.1
Principal Component Factor Analysis Cumulative Percentage of Variance

<table>
<thead>
<tr>
<th>Factor</th>
<th>Total</th>
<th>% of variance</th>
<th>Cumulative % of variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>14.076</td>
<td>28.727</td>
<td>28.727</td>
</tr>
<tr>
<td>Factor 2</td>
<td>5.360</td>
<td>10.939</td>
<td>39.667</td>
</tr>
<tr>
<td>Factor 3</td>
<td>3.341</td>
<td>6.818</td>
<td>46.485</td>
</tr>
<tr>
<td>Factor 4</td>
<td>2.982</td>
<td>6.085</td>
<td>52.570</td>
</tr>
<tr>
<td>Factor 5</td>
<td>2.386</td>
<td>4.869</td>
<td>57.439</td>
</tr>
<tr>
<td>Factor 6</td>
<td>2.308</td>
<td>4.711</td>
<td>62.149</td>
</tr>
<tr>
<td>Factor 7</td>
<td>2.093</td>
<td>4.272</td>
<td>66.422</td>
</tr>
<tr>
<td>Factor 8</td>
<td>1.890</td>
<td>3.857</td>
<td>70.278</td>
</tr>
<tr>
<td>Factor 9</td>
<td>1.743</td>
<td>3.557</td>
<td>73.836</td>
</tr>
<tr>
<td>Factor 10</td>
<td>1.598</td>
<td>3.262</td>
<td>77.098</td>
</tr>
<tr>
<td>Factor 11</td>
<td>1.384</td>
<td>2.824</td>
<td>79.922</td>
</tr>
<tr>
<td>Factor 12</td>
<td>1.197</td>
<td>2.442</td>
<td>82.364</td>
</tr>
<tr>
<td>Factor 13</td>
<td>1.149</td>
<td>2.345</td>
<td>84.709</td>
</tr>
<tr>
<td>Factor 14</td>
<td>1.046</td>
<td>2.134</td>
<td>86.843</td>
</tr>
</tbody>
</table>

The first of the 8 factors contained 30 of the 49 survey questions, and the factor analysis proved that the inter-item correlations were extremely strong. The questions in Factor 1 together explained 28.727% of the variance, by far the largest single percentage of variance of any of the 8 factors. Each of the next 7 factors had between 1 to 7 questions clustered together. In the factors with only 1 question, it was assumed that the question did not correlate with other questions. Table 1 presents the results of the factor analysis.
Table 4.2

Factor Analysis Results for Survey Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Factor1</th>
<th>Factor2</th>
<th>Factor3</th>
<th>Factor4</th>
<th>Factor5</th>
<th>Factor6</th>
<th>Factor7</th>
<th>Factor8</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>.802</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>.791</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>.791</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>.741</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>.740</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>.713</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>.686</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>.664</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>.652</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>.652</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>.620</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>.614</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>.605</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>.604</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>.601</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>.599</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>.589</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.580</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.573</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>.569</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>.565</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>.561</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>.560</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>.550</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>.549</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>.545</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>.506</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>.470</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>.441</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>.510</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
<td>490</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td></td>
<td>.716</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>.651</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td></td>
<td>.640</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>.580</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>.516</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>.390</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>.612</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td>.559</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>.471</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>.426</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td>.544</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td></td>
<td></td>
<td></td>
<td>.477</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.396</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.481</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.433</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.461</td>
</tr>
<tr>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.609</td>
</tr>
</tbody>
</table>
After completing the factor analysis, the questions were grouped into the 8 factors. For example, Factor 1 had 30 questions, while Factor 2 contained questions 36, 46, 17, 41, 5, 22 and 16. Prior to performing the t-test for Factor 1, missing responses were replaced with the mean score of all responses. In Factor 1, there was one question in each of the sections relating to high expectations, principal leadership, and teacher effectiveness that had a missing response replaced. The sections concerning student teacher relationships and the use of data each had 2 questions that had missing data replaced with the average of other responses. The schools were divided into high-performing and low-performing based on test performance, and an independent samples t-test between the 2 groups was completed for each factor.

While a t-test is a relatively simple statistical calculation, it is frequently used to show the differences between groups of respondents in situations similar to this study. The results of the independent t-test showed that for Factor 1, there was a statistically significant difference (t(1,28)= -2.676, p <.05)) between the campuses identified as low and high-performing. The mean of the high-performing campuses for responses to these 30 questions was 45.41 with a standard deviation of 8.36, and the mean for the low-performing group was 55.30 with a standard deviation of 11.63, showing a wider variation in the lower performing group than among the high-performing campuses. The scale of responses on the survey was 1= strongly agree, 4= strongly disagree, so the lower scores reflected more positive responses to the questions. For Factors 2 through 8, however, there were no statistically significant differences between the low and high-performing campuses.
In analyzing the questions in Factor 1, the high number of questions clustered in this factor led to an investigation into whether the questions within Factor 1 would show a difference between low and high-performing groups if they were divided into the categories of questions originally identified as research questions for the study. The 30 questions that were grouped to comprise Factor 1 included questions from each of the 5 categories originally hypothesized to impact student performance. There were 8 questions out of 10 on the survey relating to student teacher relationships, 5 of 9 questions from the survey pertaining to leadership, 4 out of 10 questions which asked about the use of data, 8 out of 11 that asked about high expectations and 5 out of 9 of the questions from the survey pertaining to teacher effectiveness.

A Cronbach’s alpha test of reliability was completed to judge the reliability of the items for each of these subcategories, and the results are presented in table 4.4.

<table>
<thead>
<tr>
<th>Leven’s test for equality of variance</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F</strong></td>
<td><strong>Sig.</strong></td>
</tr>
</tbody>
</table>
Next, an independent t-test for equality of means was performed on each sub-category of question from factor 1. The results indicated that the sub-categories of questions representing high expectations, teacher effectiveness, and student teacher relationships continued to show significance when analyzed independently of other categories. These groups of questions showed statistical significance between the responses of the low and high-performing campuses when the 2 groups were compared. Principals from high and low performing schools responded similarly to questions involving the use of data for improving instruction (p>.05) and to questions concerning principal leadership (p>.05).

Table 4.5

<table>
<thead>
<tr>
<th>Mean scores and T-tests for Subcategories in Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean low-performing</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Factor 1 subcategory: student teacher relationships</td>
</tr>
<tr>
<td>Factor 1 subcategory: teacher effectiveness</td>
</tr>
<tr>
<td>Factor 1 subcategory: high expectations</td>
</tr>
<tr>
<td>Factor 1 subcategory: principal leadership</td>
</tr>
<tr>
<td>Factor 1 subcategory: use of data</td>
</tr>
</tbody>
</table>

* significant at p<.05  
**significant at p<.01
<table>
<thead>
<tr>
<th>Factor</th>
<th>Leven’s test for equality of variance</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.382</td>
<td>.542</td>
</tr>
<tr>
<td>Factor 3</td>
<td>.265</td>
<td>.611</td>
</tr>
<tr>
<td>Factor 4</td>
<td>.358</td>
<td>.554</td>
</tr>
<tr>
<td>Factor 5</td>
<td>.485</td>
<td>.492</td>
</tr>
<tr>
<td>Factor 7</td>
<td>3.73</td>
<td>.064</td>
</tr>
<tr>
<td>Factor 8</td>
<td>.083</td>
<td>.776</td>
</tr>
</tbody>
</table>
Table 4 reveals the results of the t-tests completed for Factors 2 through 8. None of these factors indicate a statistically significant difference in responses between the low and high-performing schools. Questions in Factor 2 primarily related to obstacles that might get in the way of students or teachers being able to do their best work, although a question about relationships was included in this factor. The mean of responses for low performing schools was 17.93 with a standard deviation of 2.84, and for high-performing schools the mean was 17.09, with a standard deviation of 3.36.

Questions in Factor 3 primarily related to using data to change curriculum so that students could perform well on state assessments. However, there was no statistically significant difference between the answers given by low and high-performing campuses to questions in Factor 3. The mean of the responses was almost identical, at 9.23 for high-performing schools and 9.21 for low-performing schools.

There were 4 questions from the survey that clustered to make Factor 4, and each of them referred to teachers or teacher behavior. Again, there was not a significant difference in the responses of low and high-performing campuses for this factor. Mean response rates for high performing campuses were 7.07, with a standard deviation of 1.53, and for the low-performing campuses, a mean response of 6.73 with a standard deviation of 1.39.

Factor 5 had only one question, “It is unusual for teachers to have conversations with me or other staff members about student assessment data.” There was no statistically significant difference in the responses between the 2 groups of schools to this question. The mean response rates were almost identical at 3.47 and a standard deviation of .83 for high performing schools and 3.60 and a standard deviation of .63 for low performing schools.
Factor 6 also had only 1 question, and that was “Teachers at our school have little time to problem-solve instructional issues with their colleagues.” There was no significant difference in the responses between low and high-performing campuses. Mean response scores were 3.07 for high-performing campuses with a standard deviation of .70, and a mean response of 2.67 for low-performing campuses with a standard deviation of .62, showing little difference in the responses of the 2 groups to this question.

Factor 7 also had only 1 question associated with it. The question was “Most teachers in our building are rated ‘exceeds expectations’ on PDAS. There was no significance to responses, with high performing schools reporting a mean response of 2.47 and a standard deviation of .83 while low-performing schools had a mean response rate of 2.47 and a standard deviation of .52.

Finally, factor 8 also had only 1 question. “Faculty meetings are used primarily for school business and to share information.” There was no statistical difference between the responses of low and high-performing campuses to this question. High performing schools had a mean response rate of 2.40 with a standard deviation of .99, and low performing campuses displayed a mean response rate of 2.40 with a standard deviation of .91.

In summary, the statistical analysis portion of the research showed significant differences between low and high-performing campuses only on Factor 1. However, this factor contained 30 of the 49 questions from the survey representing a substantial number of questions from each category hypothesized to have an impact on student performance. The subcategories of questions about high expectations, student teacher relationships, and teacher effectiveness from Factor 1 also showed statistically significant differences.
Results of Qualitative Analysis

A total of 8 school administrators were interviewed, 4 from the group identified as low-performing, and 4 from the group identified as high-performing. With 1 exception in the high-performing group, all schools were located in the same urban school district. The high-performing school outside of the urban district was located in a suburb of a large urban district that was primarily a working class area with many refineries and chemical manufacturing plants as primary economic sources. It was included due to the difficulty in gaining access to principals from high-performing campuses in the urban district.

Although the 4 schools identified as low-performing showed below the state average performance for African-American economically disadvantaged students for at least 1 of the years of the study, further review of data for the previous 3 years demonstrated that these schools had been making steady improvement during that time. The following is a table of the cumulative results from each of the schools identified as low-performing:
Table 4.7
Three year Performance on TAKS Tests, All Grades Combined, Low Performing Schools

<table>
<thead>
<tr>
<th>School</th>
<th>Year</th>
<th>Read</th>
<th>Change</th>
<th>Math</th>
<th>Change</th>
<th>Writing</th>
<th>Change</th>
<th>Science</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2003</td>
<td>45</td>
<td></td>
<td>42</td>
<td></td>
<td>50</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>64</td>
<td>+19</td>
<td>45</td>
<td>+3</td>
<td>82</td>
<td>+32</td>
<td>22</td>
<td>+4</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>68</td>
<td>+4</td>
<td>55</td>
<td>+10</td>
<td>79</td>
<td>-3</td>
<td>27</td>
<td>+5</td>
</tr>
<tr>
<td>B</td>
<td>2003</td>
<td>41</td>
<td></td>
<td>32</td>
<td></td>
<td>48</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>50</td>
<td>+9</td>
<td>39</td>
<td>+7</td>
<td>65</td>
<td>+17</td>
<td>8</td>
<td>+2</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>64</td>
<td>+14</td>
<td>52</td>
<td>+13</td>
<td>68</td>
<td>+3</td>
<td>44</td>
<td>+36</td>
</tr>
<tr>
<td>C</td>
<td>2003</td>
<td>60</td>
<td></td>
<td>59</td>
<td></td>
<td>60</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>74</td>
<td>+14</td>
<td>68</td>
<td>+9</td>
<td>75</td>
<td>+15</td>
<td>39</td>
<td>+7</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>77</td>
<td>+3</td>
<td>72</td>
<td>+4</td>
<td>83</td>
<td>+8</td>
<td>45</td>
<td>+6</td>
</tr>
<tr>
<td>D</td>
<td>2003</td>
<td>49</td>
<td></td>
<td>32</td>
<td></td>
<td>26</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>64</td>
<td>+15</td>
<td>57</td>
<td>+25</td>
<td>69</td>
<td>+43</td>
<td>57</td>
<td>+30</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>69</td>
<td>+5</td>
<td>65</td>
<td>+8</td>
<td>79</td>
<td>+10</td>
<td>44</td>
<td>-13</td>
</tr>
</tbody>
</table>


When gains and losses are averaged over the 4 subject areas and the 3 years, School A increased an average of 9 points, School B an average of 13 points, School C an average of 8 points, and School D an average of 15 points from the scores posted in 2003.

All of the principals of the low-performing schools have been in their positions for a relatively short period of time. Three of them are in their 3rd year at their current campus, and one is in her 5th year. Principals at 3 of the schools stated that they were placed in the school to improve conditions that existed before their arrival.
Principals at campuses identified as high-performing have been on their campuses for periods ranging from 1 to 7 years. Two were previously assistant principals, 1 was already a principal and transferred to her school, and 1 was a principal of a school that was split due to overcrowding. Results from the campuses identified as high-performing also show improvement. Table 13 shows the performance from the high-performing schools.

Table 4.8
Three year Performance on TAKS Tests, All Grades Combined, High Performing Schools

<table>
<thead>
<tr>
<th>School</th>
<th>Year</th>
<th>Read</th>
<th>Change</th>
<th>Math</th>
<th>Change</th>
<th>Writing</th>
<th>Change</th>
<th>Science</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>2003</td>
<td>76</td>
<td>+8</td>
<td>79</td>
<td>+9</td>
<td>86</td>
<td>+2</td>
<td>72</td>
<td>+48</td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>89</td>
<td>+5</td>
<td>77</td>
<td>-2</td>
<td>89</td>
<td>+3</td>
<td>65</td>
<td>-7</td>
</tr>
<tr>
<td>F</td>
<td>2003</td>
<td>59</td>
<td></td>
<td>62</td>
<td></td>
<td>63</td>
<td></td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>84</td>
<td>+25</td>
<td>91</td>
<td>+29</td>
<td>97</td>
<td>+34</td>
<td>25</td>
<td>+3</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>87</td>
<td>+3</td>
<td>89</td>
<td>-2</td>
<td>85</td>
<td>-12</td>
<td>85</td>
<td>+60</td>
</tr>
<tr>
<td>G</td>
<td>2003</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>80</td>
<td></td>
<td>77</td>
<td></td>
<td>80</td>
<td></td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>2003</td>
<td>78</td>
<td></td>
<td>70</td>
<td></td>
<td>77</td>
<td></td>
<td>40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2004</td>
<td>87</td>
<td>+9</td>
<td>86</td>
<td>+16</td>
<td>91</td>
<td>+14</td>
<td>66</td>
<td>+26</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>91</td>
<td>+4</td>
<td>91</td>
<td>+5</td>
<td>98</td>
<td>+7</td>
<td>74</td>
<td>+8</td>
</tr>
</tbody>
</table>

New campus-data available only for 2005

For additional comparison, table 7 displays each of the interviewed schools with the results of 5th grade African-American economically disadvantaged students on Math and Reading tests.

Table 4.9: TAKS scores, 2004 and 2005, Fifth Grade African-American and Economically Disadvantaged Students’ Passing Rates, Interviewed Schools First Administration Only.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>51</td>
<td>39</td>
<td>29</td>
<td>37</td>
<td>28</td>
<td>35</td>
<td>9</td>
<td>28</td>
</tr>
<tr>
<td>B</td>
<td>30</td>
<td>45</td>
<td>29</td>
<td>48</td>
<td>33</td>
<td>37</td>
<td>34</td>
<td>60</td>
</tr>
<tr>
<td>C</td>
<td>54</td>
<td>40</td>
<td>38</td>
<td>73</td>
<td>51</td>
<td>44</td>
<td>41</td>
<td>64</td>
</tr>
<tr>
<td>D</td>
<td>29</td>
<td>50</td>
<td>27</td>
<td>45</td>
<td>47</td>
<td>42</td>
<td>48</td>
<td>61</td>
</tr>
<tr>
<td>E</td>
<td>78</td>
<td>74</td>
<td>85</td>
<td>72</td>
<td>77</td>
<td>74</td>
<td>84</td>
<td>70</td>
</tr>
<tr>
<td>F</td>
<td>63</td>
<td>57</td>
<td>85</td>
<td>77</td>
<td>64</td>
<td>56</td>
<td>84</td>
<td>80</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td>67</td>
<td>67</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>63</td>
<td>69</td>
<td>53</td>
<td>67</td>
<td>77</td>
<td>79</td>
<td>75</td>
<td>76</td>
</tr>
</tbody>
</table>


Some of the schools that qualified for the study during school year 2003-2004 did not fit the criteria for school year 2004-2005 and some who fit for 2004-2005 did not previously fit the criteria because the scores reported for African-American or economically disadvantaged students were not above or below the state average for that testing year, or in the case of 1 school they did not have results from spring 2004 because they opened in fall 2004.
Student Teacher Relationships

Responses from an initial survey of principals in another urban district, along with literature written primarily by African-American authors, led to an interest in the importance of student teacher relationships for African-American economically disadvantaged students. Questions that were asked in the interviews related to what principals saw teachers doing both in and out of the classrooms to build relationships and what kind of interaction outside of school the principals knew happened on a regular basis. Other queries included asking how staff members would react to the statement, “They won’t care to learn until they learn how much you care” and what differences would be observed between those who did and did not agree with the statement.

Several of the principals responded to questions regarding their observations about teachers and their student interactions with statements about teachers providing material resources to students. One said, “They provide a lot…they provide pencils, paper, uniforms. That’s what you see all year long.” Another said, “We buy things for kids out of our own pockets, but we don’t let everybody know we’re doing things for different kids. When we see a need, staff members just pitch in.” There did not appear to be any difference between the 2 groups of schools in this area.

Another theme that emerged from the responses given was a willingness by teachers to commit time outside the school day. Again, this response was received from both groups, but there appeared to be more discussion at the high-performing campuses about teachers providing extra curricular types of activities for students on their own time. Things frequently mentioned were participation and sponsorship of UIL competitions and clubs at the school. One principal said that she was determined to provide many of the same opportunities to her students that she had as a young person herself, and her teachers “want to do something for the kids, making sure
they grow socially and culturally. All the sponsors for the different organizations…they don’t get paid for that, they just do it.”

Responses at the low-performing campuses referred to teachers taking students under their wings in order to provide additional opportunities for students who might not ordinarily receive them. One administrator said, “They’ve kind of taken ownership of these kids. They’ll get these kids, pick them up, go do things together and then drop them off.” Another talked about a teacher who was very effective on her campus, who often takes students to museums, to the symphony and other events in order to expose them to things outside of their typical experience.

While 1 principal at a low-performing school indicated that his staff had positive relationships with students, the observations made during the school visit did not appear to support his belief. Teachers were observed yelling at students in order to maintain order in the halls, students were seen talking back to teachers and ignoring their directives, and the process of moving in the halls appeared to be chaotic and disruptive. However, the principal was able to give specific examples of his own behavior that supported a climate of openness and respect, saying it was important for students at his school to know “this is a place …people are going to treat you with respect.” In most of the schools visited the interactions between teachers and students appeared to exemplify respectful treatment, but in this particular low-performing school it did not seem that the teachers were implementing the principal’s vision of a respectful campus.

When trying to pinpoint what approaches teachers used, principals at both groups of campuses described things such as teachers giving pats on the back, hugs, kisses on the forehead, greetings at the door in the morning, and other methods of positively reinforcing students and building relationships. At the end of 1 campus visit to a low-performing school, a teacher was observed bent over talking to a child saying, “I’ve been very proud of you. I’ve been hearing
really good things about you.” The principal noticed the exchange and reported that she frequently heard comments like that from teachers at her school. Another principal in a low-performing school said that teachers often celebrate successes with students in very specific ways. For example, “Last week you read at 90 words per minute, this week you read at 95 words per minute. Wow!” She stated, “Those kinds of things really are marks of people who care about kids.”

Principals at several of the high-performing schools identified simple conversations as a way they knew teachers were connecting with students. One said, “Like on Monday, you’ll hear them go through and ask what happened over the weekend.” Another said,

You know that relationship building just doesn’t have to be anything that’s noticeable or direct, just the all day long type things. The way they just talk with them, listen to them, how the kids respond. You have to engage kids in conversation.

Most of the principals responded that a large percentage of their staff would agree with the statement, “They won’t care to learn until they learn how much you care.” However, 1 principal at a low-performing school said probably only 75% of her staff would agree if they were very honest.

Principals at both groups of schools believed strongly in the power of building relationships with students, with one even saying, “Look, if you don’t show that you care about this kid, they aren’t going to care about you. After that, all they’re going to do is make your life miserable.” A principal at another low-performing campus stated flatly, “If you don’t make a bond with kids, you’re sinking your boat.” Another stated a similar belief about how important she believed it was to establish relationships before even attempting academic tasks. “Until you have that relationship established, you’re not going anywhere academically.”

Another administrator at a high performing school stated that because they had established relationships, students felt free to come to school personnel for assistance. “Our
children do a lot of confiding in us, they look to us to give them advice, they come to us for help.” At a high performing campus where the principal became visibly emotional when talking about the importance of building relationships with students, she also shared experiences she had of working at the school on the weekend and having children ride their bikes up to the school and ask her if they could come in. She was grateful that the school had developed a reputation as a safe haven for them. Another principal at a high-performing campus said that they rarely had discipline problems, and she attributed that to the time that had been taken to build relationships with students. At a low-performing campus, the principal shared his belief that if kids in poverty didn’t have a connection with the teacher, they wouldn’t behave for the teacher.

Overall, there were many similarities in responses to the questions about relationships with students between principals at both low and high-performing campuses. One apparent difference was that high performing campuses talked more about extra curricular types of activities in their responses about building relationships. All principals seemed to acknowledge the importance of building relationships with students in order to maximize their performance and many felt that their staff shared similar beliefs.

Teacher Effectiveness

A component identified in much of the research surrounding effective schools is the effectiveness of the teachers at the school. Therefore, principals were asked questions about their teaching staff in an attempt to determine their opinion of the quality of teachers at their campus. Questions ranged from the data principals had collected to assess teacher effectiveness to a particularly powerful question that asked them to name their most effective teacher in grades 3-6, describe the teacher and then rate other teachers on their campus against that teacher. A similar
question was sometimes asked about the least effective teacher on campus. Analysis of the data collected found the answers grouped in the following categories: teacher characteristics, time commitment, teacher expectations of students, instructional expertise, experience, student/teacher relationships, classroom management, and finally a section on the ineffective teacher.

There were some noticeable differences between the high and low-performing campuses in response to these questions. In particular, principals at 3 of the 4 high-performing campuses described their faculties as very strong as a whole. One said, “You’re never going to have a perfect staff, but this is about as close as you’re going to get.” She indicated that 98% of her teachers, in her opinion, were great teachers. Another high-performing campus administrator said that her faculty was really strong. At a 3rd high-performing campus, the administrator estimated that most of her teachers would be a 4 on the scale compared to her most effective teacher. The 4th high-performing campus was a little more critical of her staff, stating that on a scale of 1-5, most of the teachers in grades 3 through 5 at her school would be 2s or 3s in comparison to her best teacher.

At the low-performing campuses, the administrators were more likely to rate their other teachers lower than their best teacher. One said, “In my opinion, all my 3-6 grade teachers are at least a 3 (on a comparison scale of 1-5) or they wouldn’t be here.” Another said, “I would say the majority, the rest of them are 70% of the teacher that she is.” She went on to explain that her most effective teacher was such a combination of skills and love for children that “some would equal her teaching skills but not her passion for the life of the children. Some have passion but not skill. Some strike a great balance, but don’t have the intensity and stamina that she has.” Another administrator said that a 3 on a 1-5 scale probably best described most of her other
teachers, although “one grade has a couple of really dynamic teachers, but I wish I had all of them that way.” One administrator at a low-performing campus indicated that most of his staff would be at least a 4 on a scale of 1 to 5. However, this principal offered little substantiation or explanation for that opinion.

In describing characteristics of their identified strongest teachers, administrators from both groups used superlative statements to describe their strongest teacher. Most described a person who was respected in their building for their expertise, who would often take the most difficult and challenging students and be successful with them. Two of the principals reported that their identified teacher would be retiring at the end of the year and would leave a hole at their campus. “She’s just that person that will be impossible to replace. It will be a big hole.” Other descriptions of the best teacher included “a true professional” and “Incredibly talented, smart, adaptive. Takes ownership, not just (of) her kids, but the whole school.”

An area that many principals identified as being indicative of a strong teacher was the time commitment teachers were willing to invest in order to help students be successful. A principal at a high-performing campus said, “Some of the teachers tutor (during their) 45 minute planning period…I can’t ask them to do that, but some of them just do it anyway.” That same principal also described staff who had willingly taken on sponsorship of after-school activities in order to provide extra curricular opportunities for students. Similarly, at a low-performing campus, the principal said that teachers had assured him there was no reason to pay them for after school tutoring, they simply wanted the students to be successful. Another high-performing campus administrator said that an effective teacher in her mind would be one who was willing to stay late to make sure things were ready for the next day, or grade papers so that children had immediate feedback. She also mentioned the importance of a teacher’s willingness to tutor
students when needed, saying her ideal of an effective teacher would include “…those that are able to pull Johnny to the side on a Thursday…and say ‘Let me work with you. I see where you missed some of these and let’s try to figure out why you’re missing.’”

High expectations were also a factor in identifying a strong and effective teacher for both groups of principals. One administrator at a high-performing campus said, “She doesn’t let them off the hook. She’ll keep asking and rephrasing the question until the kids eventually learn ‘I’m going to have to answer her because she’s not going away.’” Another at a low-performing campus described a teacher who never had problems with student discipline, but would also not let students slide on their responsibilities. She said it would not be uncommon for the teacher to pass her in the hall with a student and say, “I’m getting real upset with this student because he’s not turning in his work. But we’re going to fix that. It’s not going to be a problem.” At a high performing campus, the principal said her most effective teacher “pushes without frustrating” all of her students, and it didn’t matter if they were special education, ESL, or any other category. This teacher includes all her students in the learning and “they believe she believes they can do it.” A principal at another low-performing campus also described his most effective teacher as one who “has high expectations for kids, for themselves, for their team members and for the administration.” This level of expectation was a common theme among several of the schools, regardless of their performance level.

When describing effective teachers, principals inevitably pointed to instructional skills as a hallmark of their performance. Many described teachers who were able to tap into the interest of children in order to stimulate their excitement about learning. “It’s a teacher that’s been able to figure out what the kids need and work from that angle.” “She prepares well for her lessons, she has a lot of hands-on activities…real world type of stuff.” “She brings in lots of creepy
crawly things into her room.” Other comments pointed to the teachers’ ability to make learning challenging for students. “She utilizes higher order thinking skills in a way that brings out the at-risk learner.” “You always see kids thinking, working hard, using strategies.” Principals from both groups of schools identified similar instructional skills when describing their effective teachers.

While relationships will be discussed in another section of this chapter in more detail, it is important to include comments about teacher effectiveness and student relationships at this point. Several principals pointed to the ability to sustain strong relationships as an important factor in teacher effectiveness. A principal at a high-performing campus said in response to a question about what she looked for when interviewing teachers, “It’s that sparkle when you talk about kids. When you love kids and love to work with kids, it just makes a difference.” At a low-performing campus, the principal said his most effective teacher “has good relationships with her students. They tend to want to be around her and want to do their best and work with her.”

Principals at several of the low-performing campuses discussed the importance of classroom management when talking about effective teachers. Several of these principals had come to campuses that were performing poorly and had been working for several years to improve that. They recognized the importance of discipline and classroom management so that learning could take place and praised effective teachers who were able to handle student issues effectively. One said, “She deals with her students…she never has an issue with a kid. There’s not a situation she doesn’t feel she can handle.” Another principal described several new teachers who had been hired with great expectations, but rapidly showed that they lacked the classroom management skills to be effective in intermediate grades. This principal moved the new teachers down to a primary grade and moved the primary teachers up to the intermediate
grades because he knew they could manage classrooms and maximize learning. He stated, “If they can handle discipline we can focus them on instruction, but if they can’t handle discipline, we can’t do anything. Now I feel comfortable in every classroom 3-6 there’s a strong teacher that can handle discipline…that can teach.”

Principals in both groups described teachers they would label as ineffective. Frustration with behaviors of these teachers was evident, as principals described teachers who weren’t able to connect with students, who blamed students for their lack of success, and who often seemed to have no business being around children. One principal at a low-performing campus stated that his least effective teacher was an alternatively certified teacher who taught kindergarten and regularly sent as many as 10 children to the office by 9:00 in the morning. When questioned about his classroom management, the teacher said it was not his responsibility to make them behave; it was the responsibility of the parents. The principal had succeeded in gaining the resignation of this teacher, whose last day was early in the 2nd semester of the year. Fortunately for most principals, the number of teachers who fit this category was typically very small. One administrator at a low-performing campus said, “I am thankful that the number of teachers who need intensive remediation are very low.” Another at a high-performing campus stated, “I only have 2 teachers on my campus that I would say don’t need to belong with kids.”

While most principals could readily identify this small group and discussed their frustration and lack of satisfaction with these lower performing teachers, for many there was a sense of resignation and a lack of power to eliminate these teachers. Some of the least effective teachers were long-term staff members, with many years of experience, so principals tried to minimize the impact they had on the campus possibly because they believed non-renewal would not happen. One principal at a high-performing campus said, “I can’t get rid of her because of
her tenure.” However, principals at 1 low and 2 high-performing campus discussed specific efforts to rid their campus of ineffective teachers, including offering transfers and if necessary, providing the documentation for non-renewal or termination.

In summary, principals at campuses identified as low and high-performing were readily able to identify characteristics of effective and ineffective teachers. While principals at low-performing campuses indicated that their teachers were more average in relation to their most effective teacher, principals at high-performing campuses were more likely to feel that their faculty as a whole was more effective and more closely resembled their most effective teacher.

*High Expectations*

Another factor that was hypothesized to make a difference in the performance of African-American economically disadvantaged students was high expectations of student performance. There were few differences noted in the interview portion of the research between schools that were low and high-performing when asked to respond to questions about holding high expectations. One principal at a high performing campus responded, “I would find it hard to believe that every school doesn’t have high expectations. How they go about getting it is another thing. I just think we all have the same expectation.” That is obviously not a statement that can be corroborated, but it is apparently supported by the responses to interview questions. No matter the performance level of the school, the principal was forceful in stating that the school had high expectations for students.

In one particularly revealing interview, however, a principal of a school identified as low-performing did admit to having realized that he had previously allowed teachers to make excuses for student’s lack of performance and thereby created an atmosphere that made it acceptable for
some kids to fail. After listening to conversations with teachers, he realized that he was allowing too many excuses, and as a result, “We have such low expectations of them that we’re not teaching them what we need to teach them. They’re not being taught on grade level because we think they’re too low.” After making this observation, he began to consciously remind teachers that they were to always assume students can learn.

So the bottom line is you’re going to teach that grade level. The kids can learn if you each them as if they can learn. If you think all kids can get better and learn and develop then you’re going to nurture that and you’re going to help that student get better. So that’s where we’re at.

This principal’s observation, subsequent change in talk with his teachers, and his own expectation for them in their treatment of students has resulted in reduced talk from teachers about students not being able to perform. He says of this year, “I haven’t had those complaining talks about the ‘the kids can’t do it’ because they know I don’t want to hear it. I don’t. I’m not going to accept it.” In that school, student performance has steadily risen over the last 3 years.

Similar responses were noted between groups to a question about faculty response to a student’s poor performance. A principal at 1 of the high-performing campuses stated her teachers “Never give up.” At 1 of the low-performing campuses, the principal said that teachers kept having conversations about students who were not performing, going to other teachers with particular expertise and looking for answers until the child is back on track.

At 1 of the high-performing campuses, the principal stated that they “were a hard working campus and we have high academic and behavioral expectations.” However, later she sighed and stated, “It bothers me a whole lot if that’s the first thing they do (in response to student poor performance). Initially they start looking at any type of mitigating factors.” She didn’t feel that teachers always accepted the responsibility for students not learning because she rarely heard, “Well, I failed.” She was more likely to hear a teacher list factors that kept the
child from being successful. She stated that she had worked hard to break teachers of what she described as self-fulfilling prophecies of student failure, instead encouraging them to believe in the students. “I really think if teachers believe ‘oh, you can do it, you’re great.’ Even if they don’t believe in their gut, but that’s what they’re saying and they make that child believe, then that child will rise to the challenge.”

At another high-performing campus, the principal said that potential teachers’ responses during the interview to a question about homework were often a tell-tale sign that they would not fit in on her campus. She explained that she describes the difficulty many of the children face because of the rough neighborhood they live in, and then asks what the teacher would do when the child came in without homework. Applicants who responded that they would let the child slide without turning homework in would not be a fit for her campus, because at their school children must turn in work. She stated, “Here, once you walk through the door…forget what’s going on out there. This is what’s happening here. We don’t care what’s happening outside…we don’t address what’s happening outside. They know we don’t take the excuses, so just come on with it.” She also told about the response she expected her teachers to give if a child wanted to tell about a shooting or some other occurrence that had happened in the neighborhood. She instructs the teachers to ask if the event happened at their house or did it affect anybody in their house? “If the answer is no, then we’re going on with instruction.” In her view, the school’s job is to provide a safe haven from the outside world, and to not allow the distractions of the neighborhood to impact the instruction that they were working to provide the students at their school.

In summary, the interview portion of the research process yielded little reported differences between low and high-performing schools in the area of high expectations. However,
it was interesting to note that some principals had observed behaviors that didn’t fit with his or her expectations for his or her campus, and at least one was actively monitoring his staff’s attitude about student expectations with the intention of raising standards for student performance even higher.

Principal Leadership

Some of the richest dialogue of the interviews took place when principals answered questions about their leadership. Most answers typically clustered around themes such as the principals’ involvement in the instructional program, their belief in the need for accountability, their visibility on campus, their provision of resources, their style or characteristics of leadership, how they inspired their faculty to improve, and what they provided the staff in professional development opportunities.

Principals from both groups identified practices that involved them in the instructional program of the school. Involvement levels varied from one principal at a high-performing school who led the students through a 15 minute opening exercise each day to reteach specific TAKS objectives, to others who felt their most effective impact were conversations held during grade level meetings when student performance data were reviewed and teachers presented plans for how they were remediating areas of weakness. Statements from each group demonstrated their belief in the importance of their involvement in the instruction of the school. One principal at a campus identified as low-performing said, “Overall you need to have a principal that’s focused on instruction and that is going to look at data and understand what that means and is going to walk in the classroom and expect that that’s being addressed.” Another administrator at a campus identified as high-performing said, “When I walk around to classrooms, I have to see
evidence of instructional focus.” These types of comments were common, indicating a fairly universal belief in the importance of the principals’ role in this area.

However, the intensity of their involvement seemed to vary somewhat, and that did not seem to be attributable to whether the school was low or high-performing. One principal at a low-performing campus said that while everything eventually went through him, he had turned much of the management of the instructional program over to his assistant principal to utilize her strengths. Two other principals at low-performing campuses indicated a much more detailed awareness of their school’s instructional program. At high-performing campuses, the administrators’ attitude also ranged from one who was extremely involved to one who was dependent on the knowledge and expertise of teachers to drive the improvement of instruction.

Principals were able to give specific examples of how their knowledge and involvement had made changes in the curriculum or instruction of their school. A principal at a low-performing campus said that earlier this year he observed little writing going on in the 4th grade classrooms at his school. When the 4th grade teachers were queried about this, they reported that the district had instructed them to only work on writing sentences at the beginning of the year, not to have the students write compositions. The principal insisted that teachers incorporate more writing into the classrooms, because

If we don’t get to writing right now, we’re going to be in this panic mode in January and we’ll do writing all day long and the kids are going to hate it and you’re not going to do any math and reading and the same thing’s going to happen that happened last year (scores in reading and math dropped) and that’s not going to work. I want to see writing.

Another principal at a low-performing campus reported learning early in her first year that about 95% of the 4th grade students were struggling with reading comprehension, with many reading on a kindergarten level. She was able to provide outside resources, but more importantly worked with her staff to develop systematic approaches to problem areas. She
attributes improvements made at her campus to “Putting together a system of instruction and working the system consistently with integrity.”

A revealing observation made after sorting interview information was the number of statements that had to do with holding teachers, students, and staff accountable for their actions. While these comments were typical of principals at both groups of schools, it appeared that even more conversation about accountability came from principals at low-performing schools about this aspect of their leadership. A statement from one of these seems indicative of the belief of several: “I think the teachers here want to do a good job, and they want you to tell them what you expect and be clear about it. And not change your mind every day and if you’re consistent and that’s what you want then they’re going to keep doing it.” Similarly, from another administrator at a low-performing campus, “If I’m going to say that’s important, then I need to show by what I do… walk the walk.” She went on to explain that if she had asked for student work to be displayed, she had to be willing to follow up with the teacher if student work was not displayed as she had asked.

Administrators from both groups of schools talked about having difficult conversations with teachers that were uncomfortable for both parties, but necessary in order to improve their school’s performance and examine practices that were not being successful. One principal at a high-performing campus reported non-renewing 4 teachers her first year as principal and forcing the resignations earlier in this school year of 2 poorly performing teachers. A principal at a high-performing campus said, “I just had a difficult meeting with a teacher on Monday after we did a benchmark… the results were not what I had anticipated.” In the same way, a principal at a low-performing campus said that during a grade level meeting she quizzed teachers about their grade level and classroom level goals. When they were able to state their goals, she then asked, “How
are you going to get there? What are we using? What measures are in place right now that are
going to get you to … your goal?” The overall theme of this group of responses seemed to be that
while no administrator relished putting teachers on the spot or making them feel uncomfortable,
each acknowledged the importance of doing that if they were not achieving the results they
hoped for. This theme is possibly best evidenced by a statement from one principal at a low-
performing campus about the need for accountability who said, “You have a principal that just
lets things go, you’re going to have a messed up situation in the school.”

Another topic around which results clustered was that of visibility within the school. More
principals of high-performing campuses discussed this as an aspect of their leadership than
did principals of lower performing schools. Several of these discussed specific duties they did
each day that kept them in front of students and teacher, while others talked about visits to the
classrooms. One felt her presence in the classrooms helped contain any discipline issues, while
also giving her information about what was happening in the school. “You can learn a whole lot
by just walking the halls, popping into classrooms and seeing what’s going on.” Another said, “I
visit classrooms every day so I can see if the kids are being successful in there.” Principals at
low-performing campuses also discussed being visible, but their responses tended to report more
meetings with students and teachers than classroom visits.

Principals at both groups of schools felt they provided the resources that the school
needed as a part of their leadership role. For some, resources included hiring good staff and, for
others, providing budget money for purchasing materials. One principal at a high-performing
campus said her biggest impact on instruction was facilitating for her teachers, which might even
include “going to the grocery store at noon if they need something for science the district didn’t
provide.” One administrator at another high-performing campus said her biggest impact on the
instructional program was “picking the right teachers” while another said he provided a substitute teacher so a campus leader could “come out and help the teachers and model and assist with instruction” and “I got them an extra teacher to do science.” One more practical response was from a principal at a high-performing campus who made sure that curriculum changes were supported by appropriate resources. “What are we going to need that has not been provided by the district to make sure this is implemented successfully? Let me know…we need to get it.” Principals saw providing resources in the form of personnel or materials as a function of their role, and there was little apparent difference in the response between the 2 groups about this.

Due to the difficult nature of many of their schools with high numbers of students who are economically disadvantaged and also more challenged due to lack of outside support for their school success, many principals referred to their need to keep the staff focused on their goals and the need to inspire them to greater things. While this was mentioned by a couple of the principals at high-performing campuses, each of the principals at low-performing campuses acknowledged the need for encouraging their staff and keeping a focus on their campus and individual goals. One principal at a low-performing campus said she shared with her staff data that indicated their school was “poised for greatness.” Another principal from a low-performing campus said, “I had to keep saying, ‘you can do this…we will do this…our kids are worth it.’” Several of them talked about mechanisms they had implemented for making sure the staff remembered what their goals were and using those to drive improvement. One principal at a low-performing campus reported embedding the grade level goals on a report turned in to her each week with the hope that the visibility would keep it at the forefront for teachers. Several principals at low-performing campuses talked about asking teachers what their goals were during grade level meetings, so that
teachers would understand the importance of the goals in the improvement of their campus performance.

There were a number of comments related to professional development, which included all references to collaborative planning, conversations about curriculum, opportunities for dialogue about instructional strategies, as well as more typical kinds of staff development. As one principal at a low-performing campus said, “At my school, it’s important for me that people have opportunities to talk together, to talk across grade levels, to learn from one another.” Another principal at a low-performing campus echoed this belief by stating, “I jot down questions. I talk to them, it makes them dialogue with me. They dialogue with each other. I review the data, but I want them to dialogue with me about their discoveries.” While several mentioned these types of conversations as being important, others had changed the typical faculty meetings so that focused learning was occurring during the faculty’s time together. One principal of a high-performing school said, “Every faculty meeting, I do a mini workshop for the staff.” Another at a low-performing campus described a progression of meetings during a month, beginning with the whole faculty meeting together to study a particular topic like vocabulary or measurement. The 2nd meeting of the month is broken down by intermediate and primary grades, and the focus is usually on reading. The 3rd meeting of the month is still more individualized, with teachers choosing from a selection of books and forming small groups to study them together. While some of the principals continued to view staff development as workshops or more traditional types of learning, all of the principals in both groups referred to their involvement in providing staff development as important to their campus.

The last area of leadership that was noted in analyzing responses was that of style, or leadership characteristics. The responses given indicated a range of styles from very controlling
to more laissez-faire in their approach to leading their school. The more controlling principal teaches a 10 to 15 minute lesson each day over the loudspeaker, requires teachers to reinforce those concepts during the week, and then assess them at the end of the week. She also requires teachers to hand in lesson plans as well as student assessments so that she can verify students are making progress in the manner they should. Another administrator stated, “I rely a lot on my lead teachers, my peer facilitators, because they are gurus. I tell my staff I cannot know every little facet.” Both of these principals were at high-performing campuses. At another high-performing campus, the principal said, “I just expect you to do your job and as long as you’re doing that, we’re not going to have any problems.” This was a similar response at the 4th high-performing campus, where the principal said she did not believe in “snoopervision” but rather saw her role as facilitating for teachers as long as they were doing what they need to be doing. This was the same administrator who had exited a number of staff from her building, so it did not appear that her hands-off attitude applied to everyone, just those teachers that were performing up to her expectations.

Principals at the low-performing campuses seemed to fall in-between these 2 extremes. One said, “I think the people who need direct supervision see me as controlling and I think the people who are willing and able see me more as a collaborator, where I sit back and listen to talk.” Another also saw her role as being more of a facilitator for her staff. “But then to make sure that all the things that are in place to support those important big ideas that I have, that’s where the real work (is), getting people involved in it.” Yet another said, “I’ve given my teachers and staff members a lot of autonomy.” That same principal went on to explain that this approach would not work with less effective or new teachers, however.
The category of principal leadership showed similarities in responses between both groups of principals. The primary difference that was noted from interview records was the need for principals at low-performing campuses to continue to encourage their staffs to keep their goals in sight and to remember that they must hold high expectations if their campus is to improve.

*Use of Data to Improve Instruction*

Principals at both low and high-performing campuses reported using data to change and improve curriculum and instruction. A common theme was analyzing student performance and looking for patterns that could be addressed through instructional modifications in order to improve the performance of students on the state assessment. One referred to the use of data to allow teachers to focus less on material that students already knew and devote the time to other areas that students were not doing as well in. She said (speaking to teachers), “If you’re looking at what objective they are low in and they don’t need this, then why are you making them do this again?”

A principal at a low-performing school reported creating a 10 minute focus that is done school-wide each week on a math objective that was identified using last year’s data. Teachers used student performance data to identify 3 math objectives that were weak at the school and created curriculum packets that each student works on for a few minutes each Monday in order to continue to improve their performance on those 3 objectives. Similarly, a principal at 1 of the schools identified as high-performing stated, “We looked at the mastery of the objectives and looked to see the commonality of the objectives the students missed, along with the strengths, and then we’re going back and reteaching those.”

123
Other principals referred to the use of data as helping teachers realize weaknesses in specific areas of instruction that might not have been identified without the focused use of student data. One principal at a high-performing campus said, “AEIS has been an eye opener to them because as we’ve shown them these children failed a TEKS (objective) that was a 2.1B and that was 2nd grade TEKS, so second grade teachers, how are you teaching that?” At another high performing campus the principal said, “If you’ve got half your class not getting this problem, there’s something wrong with instruction.” A similar perspective led a principal from a low-performing campus to ask, “What are we going to do, what strategies are we going to use to correct that for the future?”

The district that most of the schools were located in had instituted a very detailed methodology for data analysis that each school is required to complete. Student early-release days are provided 3 times during the year for teachers to break down the data from benchmark tests and complete a series of tasks required by the district. Possibly because of this, there were many similarities between the low-performing schools and the high-performing schools in their responses to questions about the use of data on their campus. One major difference that was observed in analyzing the pattern of responses between the 2 groups of schools was that principals in low-performing schools all reported significant changes in their staff’s use of and attitude toward data over the previous 3 or 4 years. These schools, who for this study were identified as low-performing, had in fact been making improvements over the last 3 or 4 years which coincided with most of the administrator’s arrival on the campus. The principals at these campuses pointed to specific and significant changes in their staff’s use of data over that period of time. One principal at a low-performing school bluntly stated, “The use of data was non-existent when I got here. Every teacher did whatever they wanted.” Another principal at a
different low-performing campus said that when he arrived the staff did not use data but now they have to use it and he holds them accountable for using it. Yet another administrator from a low-performing campus said her staff had learned to use data more prescriptively. Each principal at a low-performing school could detail differences in their staff’s use of and attitude toward the use of data. Several of the principals at high-performing campuses, on the other hand, seemed to indicate that there had been little change in their staff’s use of data over the last several years.

Principals at both groups of schools talked about using data for grouping students into smaller groups in order to focus instruction at the specific need of the students. A principal at a low-performing campus had developed a block of time during the day that was dedicated for tutoring purposes, and the grouping information prepared by his staff helped the teachers know which students need to be grouped together during this time. On a high-performing campus, the principal also used the grouping information for targeting instruction, saying, “We’re self contained, but in our small group instruction during reading we group kids… into ability levels in reading… and work on the skills outlined by the TAKS objectives.” At another high-performing campus, the principal stated that data helped them use their resources wisely in deciding about tutoring groups, especially when their staff was limited for activities like Saturday School.

Several of the schools use a district model for student performance that groups students into 3 groups. Tier 1 students are those who pass benchmark assessments and are anticipated to pass the state assessment. Tier 2 students are those who are on the cusp of passing, but may need some additional help in order to master the objectives. Tier 3 students are those who are in danger of failing. Within that category, students are further broken down by 3A and 3B students, with 3A being students that are failing but can probably pass the test with intensive help, while
3B students are those that even with significant help continue to be in danger of failing. This appears to be a deeply embedded system, with many of the principals interviewed referring to the tiers in a very familiar way.

At all of the lower performing campuses, principals were eager to share the data analysis that had been completed, including spreadsheets they had created to share with faculty, plans of action that had been written to address specific needs and goal sheets that were directly related to student performance. It was apparent that generous amounts of time had been spent analyzing the data at these 4 campuses. At 3 of the high-performing campuses located in the same district, there was less discussion and focus on the process of analyzing the data than from the 4 low-performing campus administrators.

However, each of the schools located in the urban district used the process created and mandated by the district, most with an acknowledgement of the difficulty and length of the process. One principal from a low-performing campus stated, “It’s a very elaborate analysis process and it’s evolved over the last 3 years.” Several of them also commented on the value of the time spent doing this analysis, with one administrator at a low-performing campus commenting, “We could choose and do pieces and parts of it to get through the process, but they (teachers) spend a whole week doing it. It’s quite a process of analyzing and planning.”

Some principals required additional data analysis or profiling that was not required by the district. One of the principals at a high-performing campus also required more frequent assessments from teachers, a weekly feedback on TEKS that had been taught during the week and a profile of each student’s performance on the assessment. She also reported requiring teachers to turn in results of those weekly checks to her so that she was aware of individual student performance on assessments. This particular principal reported a very hands-on approach
to the instructional program, including a daily series of lessons that she taught over the loud-speaker to all of the school, and frequent follow-up to insure that teachers were reinforcing the concepts she had introduced throughout the week in the classrooms. Two principals at low-performing campus required some additional record keeping for data that they believed had been helpful in focusing their teachers and students on areas of needed improvement. One instituted a requirement that students graph their own results on simple bar charts so that they visually understood what their performance on benchmark assessment had been. Another low-performing campus required teachers to keep a student profile folder and student work folders. At another low performing campus, teachers were required to assess students weekly, chart the results, and share them during a weekly meeting with the assistant principal. One low-performing school had applied for a grant for K-2 teachers that also required intensive data analysis for primary students and the use of personal digital assistants to load and store data for K-2 students. It appeared that with one exception, the low performing campuses were actively collecting and requiring more data and analysis than the high-performing campuses.

A high-performing campus reported a difference in teachers’ view toward data when she no longer manipulated the data for them, but required them to analyze it for themselves. “It didn’t impact their instruction in the classroom because they didn’t have ownership of the data. They didn’t do it themselves.” Now that all teachers on her campus are required to analyze student data, she believes there is a stronger and more cohesive focus from all teachers, not just those in the TAKS tested grades.

A principal at one of the low-performing schools that has experienced improvement in student test scores over the last 3 years reported an “air of hopelessness” when she arrived at the campus. She reported using the data from assessments to prove to teachers that their work was
having an impact, stating “That’s when you use data to show we’re getting there. Progress. Gotta be happy for something!” She has come to recognize the value of numbers and analysis for proving to staff that their efforts were having an impact on the school’s progress.

In summary, all campuses, whether low or high-performing, detailed at great length a process for data analysis. Each principal spoke to specific instructional improvements that had been made as a result of analyzing data. The only minor differences noted were more detail and depth from the principals of low-performing schools about the process, the apparent change in their staff’s attitude toward data, their use of data over the past several years, and the additional requirements that some low-performing campuses had for data collection and analysis.

Summary of Data Analysis

The results from the quantitative analysis appear to support a rejection of the null hypothesis for questions 1, 2, and 5, which related to the importance of student teacher relationships, high expectations for student success, and teacher effectiveness. Questions number 3 and 4, which targeted the importance of data analysis and the influence of principal leadership, showed no significant difference between the 2 groups of schools.

The qualitative analysis provided a much richer understanding of the dynamics and processes that had been occurring within both groups of schools over the last few years. Interviews and subsequent analysis found that both groups of schools valued the importance of student teacher relationships. The group of principals from high performing schools talked more about teacher involvement with students in organized activities, while more conversation from low-performing principals involved teachers’ involvement at an individual student level. Each of
the principals, no matter the identified performance level, seemed to recognize the importance of fostering strong relationships between teachers and students.

High expectations were also found to be valued by principals from both groups of campuses during interviews, as well as supported by the quantitative analysis. However, principals at low-performing campuses seemed to indicate that much effort was needed on their part to keep their staffs focused on the goal of improving student achievement, on the belief that the students at their schools were worth the effort, and that the teachers’ expectations have an impact on student performance.

Teacher effectiveness showed significant differences between the low and high-performing campuses at both the quantitative and qualitative portions of the study. Most compelling was the realization that more principals at high-performing campuses rated the majority of their teachers closer to their most effective teacher than did principals at low-performing campuses. Principals at 3 of the 4 low-performing campuses indicated overall teacher performance that was more average when compared to their most effective teacher.

Principal leadership issues measured in factor 1 did not show any statistically significant differences between low and high-performing campuses. Similarly, during interviews, there appeared to be common themes that occurred in both groups of principals. There was no 1 style that appeared to be predominate, with some being very controlling and others less controlling and more reliant on teachers to perform as they were expected. Some principals in both groups were very involved in the instructional program, while others were not as hands-on and saw their role as facilitating and creating the kind of atmosphere that was conducive to teachers taking ownership of the instruction. All of the principals at the low-performing schools made many
more references to outside supervision, such as from district personnel, than did their peers at higher performing schools.

There was no statistical difference between the groups in response to questions about the use of data, nor were there many differences in their answers to interview questions about analyzing and using data. Seven of the 8 interviewed schools were in the same district, which has created a very specific plan for analysis, along with release time and resources to support the process of analyzing student performance, so it was not surprising to see little difference reported. The only remarkable note from the interview portion of the research was that the principals at low-performing campuses had seen obvious changes in their staff’s use of data over the past several years.

The results of this study appear to confirm earlier research results indicating the importance of high expectations, student teacher relationships, and teacher effectiveness for those schools who are seeking to improve the performance of African-American economically disadvantaged students. In the following chapter, interpretation, recommendations and suggestions for future research are provided.
CHAPTER 5
SUMMARY AND DISCUSSION

Introduction

This chapter will restate the research problem and briefly summarize the methodology used in the study. The results will be reviewed, and the major portion of this chapter will discuss the implications of the results. In addition, recommendations derived from the research and suggestions for additional research will be provided.

Statement of the Problem

Discrepancies between the results of “all students,” “White students,” and the student groups of African-American and economically disadvantaged students on the state mandated Texas Assessment of Knowledge and Skills (TAKS) test point to the failure of many schools to adequately prepare African-American economically disadvantaged students for success on the elementary reading and math portions of the test. National testing data confirms evidence of persistent gaps in achievement between African-American and White students. Conversely, some schools with high percentages of minority and economically disadvantaged students manage to consistently produce better than average results with these specific student groups.

The problem for all educators is to find ways to close the gap between the academic performance of White students and African-American economically disadvantaged students who are at-risk of school failure. This study was an effort to discover factors that could be applied in schools with populations of African-American economically disadvantaged students to in order improve their performance.
Review of the Methodology

This study was a mixed methodology study. One portion of the research was a survey, consisting of 49 questions designed to measure 5 different categories of school factors that might impact student performance: high expectations, principal leadership, use of data, student teacher relationships and teacher effectiveness. Surveys were sent primarily to schools within 1 urban school district. Schools were defined as low or high-performing on the basis of their African-American and economically disadvantaged student performance on the 5th grade reading and math portions of the state assessment for either 2004 or 2005. Schools with performance for those portions of the test that were at or above the state average were classified as high-performing and schools with below the state average performance were classified as low-performing. The 2nd portion of the study was qualitative in design, consisting of 8 in-depth interviews with principals from low and high-performing schools. Questions were designed for each of the 5 categories of school factors hypothesized to be different at low and high-performing campuses. Interviews were transcribed and then coded according to patterns that emerged from the conversations.

Summary of the Results

A factor analysis showed that 8 factors accounted for approximately 70% of the variance in responses to questions. A t-test was then used to determine whether there was any statistically significant difference between the low and high-performing schools. The t-tests for these 8 factors indicated that there were significant differences between the 2 groups for Factor 1, but not for any of the other factors. However, Factor 1 contained 30 of the 49 questions included in the survey, representing over half of the content of the questionnaire. Additional t-tests were
completed to determine whether there were significant differences between the 2 groups of schools on 5 subcategories found within Factor 1. These additional t-tests indicated that there were significantly different responses to questions in the subcategories of student teacher relationships, high expectations, and teacher effectiveness between low and high-performing schools.

**Discussion of the Results**

The 30 questions in Factor 1 represented 61% of the questions asked in the survey. The 30 items also contained questions from each category that were proposed to have an impact on school performance for African-American economically disadvantaged students: high expectations, teacher effectiveness, student teacher relationships, principal leadership, and the use of data. The results of the quantitative portion of the study would seem to confirm the roles that student teacher relationships, high expectations, and teacher effectiveness play in improving the performance of African-American economically disadvantaged students. Interviews with principals from both groups of schools also supported the importance of each of these factors in their school’s improvement in performance. Additionally, interviews with principals from both groups of schools seemed to indicate that each principal believed his or her leadership was critical to the instructional program of the school. In apparent confirmation, the quantitative analysis did not show a statistically significant difference in the responses between low and high-performing schools to the questions in Factor 1 about principal leadership. Neither the quantitative nor qualitative analysis showed major differences between responses from the 2 groups of schools to questions about the use of data.
Interpretation of the Findings

Campuses were identified as low or high-performing based on the performance of 5th grade students on the 2004 and/or 2005 TAKS reading and math tests. However, all of the campuses that were identified as low-performing had actually been making steady improvement in their overall campus scores for the previous 3 years. This improvement in performance over time could account for some of the similarities that were noted during the interview process.

Some of the most significant discoveries made during the course of gathering data for this study were the many obstacles faced by urban elementary principals on a regular basis, as well as the inequities that can be found within a single district. A particularly powerful conclusion was drawn after interviewing the first 3 low-performing schools. Each of these 3 administrators reported behaviors that are commonly associated with effective school practices such as using data for improving instruction, ongoing learning with their staff, a consistent focus on goals, high expectations for academic progress, and their own involvement in the improvement of instruction. The realization that these schools were working extremely hard and implementing many recommended practices created a desire for a closer look at the performance of each of the schools beyond the gross generalization that was used as a criterion for this study. This closer look provided a different perspective to the view of these schools as low-performing, because each of them had experienced significant gains over the last several years. This realization led to the conclusion that the factors identified in this research must have some impact on school performance, since not only were the schools classified as high-performing reporting these factors, but schools that were exhibiting improved performance were also reporting similar behaviors. In addition, a much deeper respect was developed for the work of urban principals
who were implementing many sound practices and seeing significant improvement even in the face of difficult and somewhat insurmountable obstacles."

As an example of some of the obstacles and inequities that were discovered through further analysis of the state AEIS data provided for each campus, one of the schools identified as high-performing had an overall student enrollment of 277 for test year 2004-2005. A school identified as low-performing had an enrollment of 1,214 for that same period. The school of 277 had 3 administrators for a ratio of 1:92 while the school with 1,214 students had 4 administrators, for a ratio of 1:303. In addition, the smaller school had a building that was completely self-contained and easily accessible. The larger school had 2 campuses with multiple portable buildings. The physical arrangement of the low-performing campus increases the challenges for that school, as well as the higher number of students per administrator. Also, the higher performing campus had a per-pupil expenditure of $8,968 while the low-performing campus had a reported per-pupil expenditure of $3,460, revealing a significant $5,508 difference in the amount per-pupil spent for instruction (AEIS campus reports, 2005).

While these factors are completely outside of the scope of this study, it is germane to the current focus on high and low-performing campuses because as with most educational research, it is difficult to state emphatically that performance is affected by certain factors, when other factors can also have significant impact on student performance. The closer look at details surrounding the fiscal and administrative side of the low and high-performing campuses serve as a needed reminder of the variety of factors that can enter into a school’s effectiveness, and how it is somewhat erroneous to label a school as low or high-performing without examining all of the possible variables that may cause differences in student performance.
Student Teacher Relationships

Both the quantitative questions contained in Factor 1 as well as the anecdotal information gleaned during principal observations appears to support the importance of developing relationships with students. The quantitative analysis indicated a difference between low and high-performing schools that was significant at the p<.01 level. This was also an area that often evoked passion and tenderness from school administrators in their responses during the structured interviews. The support for relationship building found in this research appears to echo previous research into school effectiveness that pointed to the necessity of strong student teacher relationships. There is some evidence that this is even more important for African-American students than for white students. For example, Ferguson (2002) reports a survey of 95 schools that included 34,128 students. Approximately 50% of the respondents were white, but 7,120 were African-American. The survey question that most supported this theory was “When you work really hard in school, which of the following reasons are most important to you?” Students were encouraged to check all the reasons that applied. Seventy-seven percent of African-American students listed needing the grades to get into college as their first motivator, but 47% of them also said they were motivated because their teachers encouraged them to work hard. Only 15% said they were motivated when the teacher demanded it, as opposed to 29% of the white students who said demanding teachers motivated them.

Cohen (1969) studied the conceptual styles of children and felt that for students whose primary pattern of learning is more relationship oriented, as is more common with African-American students, the typical school climate “lacks cues necessary for understanding” (p.837) because it is often more oriented toward an analytical type of reasoning, rather than the use of relationships. However, the conclusion that relationships are important for African-American
elementary school students may not generalize to older students as strongly. Klem and Connell (2004) found that low levels of teacher support created greater liabilities for elementary students than for older students.

Strahan et al., (2003) reported that “Once they (students) know you are there for them and care for them academically as well as for whatever else is going on in their lives and that they can trust you, then they will open up to you” (p.216). In almost identical terms, one principal at a high-performing school said, “I’m a very giving person and they’re very giving also (staff). They don’t look for anything in return. Consequently our children do a lot of confiding in us, they look to us to give them advice, they come to us for help.” Similarly, Rutter, Maughan, Mortimore and Ouston (1979) found that, in schools with better attendance and student performance, more students reported a willingness to talk to staff about personal problems.

One observation that was apparent from several of the conversations was the importance that African-American students place on extra curricular types of events, such as clubs, competitions and after-school activities. That was made evident by the principal at 1 high-performing campus that had established a plethora of activities students could participate in. This research included a visit to that school on a day when the Christmas program was planned, and subsequent attendance at a program that was over 2 hours in length. The principal explained that parents come to the school to see their children perform, and she felt the time was well spent. This involvement in performance types of activities was a window into a cultural norm that could translate into interventions for other African-American economically disadvantaged students that would not be difficult or terribly obtrusive. In like manner, Howard (2001) reported that he found “when the interactions take place within a familiar cultural context, the likelihood
of receiving desired behaviors tends to improve significantly” (p.143). However, students who are struggling academically are often not able to participate in extra curricular events because they are staying after school for tutoring or other academic efforts. The exposure to different cultural norms made it apparent that this is a very important connection with the school for African-American students, and as such should be implemented whenever possible. One principal of a high-performing campus stated her belief in the importance of these extra curricular kinds of activities, but modified that by explaining that they also used a “no-pass, no-play” approach to the activities. In other words, student academic performance had to be maintained at a passing level for them to continue to participate in extra curricular activities.

Battistich et al., (1995) also determined that schools could make a difference in the lives of students in poverty by creating environments that were supportive. “The most encouraging aspect of the present finding is the suggestive evidence that some of its (poverty) negative effects can be mitigated if the school is successful in creating a caring community for its members” (p.649). This finding correlates to the reports by principals of low-performing schools that have shown improved performance, who reported teachers taking children “under their wings” by picking them up for concerts, museums, and basketball games. From the variety of interactions relayed by the principals interviewed for this study, the type of activity does not appear to be significant, but rather the time that is invested in students. This concept of investment in student lives is powerful, simple to understand, and relatively inexpensive to implement for schools that are attempting to improve the performance of African-American economically disadvantaged students.
High Expectations

The quantitative analysis of the current study indicates a significant difference between low and high-performing schools in their responses to questions about high expectations from Factor 1 at p<.05 level. The idea that high expectations are necessary for high achievement for African-American students is not a new one. In fact, in an ethnographic study of the value of segregated schools covering the period of 1935-1969 in the south, Siddle-Walker (2000) reported her finding that the “very nature of teaching…appears to have been transformed by these educators who… assumed student must be motivated to believe they could achieve and be held accountable for learning” (p.266-7). This sentiment was repeated in this study during a conversation with an African-American principal from a high-performing school, and her passion about this subject was powerful. She demanded that teachers not allow students to use their difficult life circumstances as an excuse for not completing work or doing their best. This kind of expectation was a revealing look at the no-nonsense approach that is expected in order for maximum student learning to be achieved at her school. It is also a departure from the more common approach of public school teachers who are often middle-class, White, and typically loving and nurturing individuals. Because of their empathy for students, there may be a tendency for these teachers to relax the standards set for all students when a student is struggling with issues at home. This perspective of “accepting no excuses” seems rather harsh and unfeeling, but could be an important point for educators to understand as they grapple with navigating cultural differences between African-American economically disadvantaged students and others.

There were numerous references from principals at low-performing campuses to conversations they had with their staffs about the need to stay focused on the school’s goals and their refusal to let their staffs give up on students. These conversations point to their
understanding of the importance of high expectations in turning around the performance of their campuses. An extremely powerful component of this study was a revealing conversation with one school administrator who had reflected on his practices and realized he was allowing teachers to have conversations about students that offered excuses for poor performance. He went on to share that by allowing these conversations to happen, he was allowing teachers to lower their standards for student performance. Once he realized this, he pointed it out to the staff, and made a conscious effort to continually remind them that they had to believe in their students’ ability to learn. The principal of the interviewed school told his teachers, “but if you think all kids can get better and learn and develop then you’re going to nurture that and you’re going to help that student get better. So that’s where we’re at.” This parallels a finding by Goddard, et al., (2000) that “in a school with a high level of academic emphasis, school members are more likely to act purposefully to enhance student learning” (p.699). The administrator who had realized the need for monitoring conversations seemed to understand with startling clarity the powerful impact that the adult language and behavior in the school could mean for student performance.

In a review of the literature relating to school effectiveness, Muijs, Harris, Chapman, Stoll and Russ (2004) concluded in similar fashion that “having high expectations of achievement among staff, pupils and parents” (p.170) is an important factor, along with instructional leadership and using data for improving and effective schools. Likewise, Cousins (1995) found a significant difference in student performance when teachers held higher expectations for students and manifested these expectations in instructional behaviors. One principal seemed puzzled when asked to explain the difference between her staff’s expectations for student behavior and those of teachers in buildings where she had served before. She said that she believed all schools had high expectations, but just went about achieving them in different
ways. However, another principal had a different perspective of school behaviors that existed earlier in her career in education. Previously, she felt that it was really an individual teacher’s personal belief that drove his or her expectation for student performance. In other words, if the teacher didn’t have a strong internal belief that students would learn, there was not an external force creating that belief.

Now, however, because of increased accountability, it is not an option for teachers to believe students can not achieve. Teachers have to actively seek out ways to reach students who may not easily master curriculum. This observation is a powerful endorsement of the effectiveness of state or federal requirements for testing in raising the bar for all students, especially when this study appears to confirm the importance that high expectations have on improved student achievement. While testing creates anxiety for school personnel and even for students, the increased focus and attention has also apparently created expectations for all students that might not exist without such attention. This external pressure is possibly why one administrator felt confident that everyone had high expectations so she didn’t think there was a difference between her school and others.

Teacher Effectiveness

Another assumption that could be reached from reviewing the data from this current study is that the quality of teachers is a critical component in order for schools to be effective, especially those that are serving African-American and economically disadvantaged students. Both the quantitative and qualitative analysis portions of this research seemed to demonstrate differences between low and high-performing campuses in the area of teacher effectiveness. The difference between low and high-performing campuses in the current study was significant at the
p<.01 level for teacher effectiveness. This supports previous research into the importance of teacher effectiveness, such as a large scale study by Hanushek, Kain and Rivkin (1998) that analyzed the performance results of 500,000 students in the state of Texas. The conclusions these researchers found included “…large differences among schools in their impact on student achievement. These differences are centered on the differential impact of teachers” (p. 3).

An apparent difference between low and high-performing campuses interviewed for this study was a belief in the overall quality of the staff at the school. Principals at campuses identified as high-performing were more likely to feel that their overall staff was very strong in relation to their most effective teacher, while principals at the lower performing campuses indicated faculty performance that was more average in relation to their most effective teacher. The conclusion that can be drawn from this observation is that, just as some literature reports, there is a strong correlation between the quality of the teachers and the performance of the students.

Three of the low-performing campus principals also discussed the difficulties that their staffs face with high student teacher ratios, difficult outside circumstances affecting student performance, and other factors that make it challenging to attract and keep quality teachers. For example, one of the high-performing campuses had an average class size for 2004-5 of 14.1, while one of the low-performing campuses had average class sizes of 21.9. The high-performing campus was one that reported “close to a perfect” staff, which leads to an assumption that the campus with lower class sizes might be able to attract better quality teachers if there are more applicants willing to teach under better conditions. Again, comparing those same 2 campuses, the average teacher salary at the lower performing campus was $42,158 for 2005, while the average teacher salary at the higher performing campus was $48,832. Teachers at the high-performing
campus have an average of 11.3 years of teaching experience, while at the same low-performing campus, the average is 6.3 years of instructional experience (TEA, 2005 AEIS report). Such patterns mirror what researchers have found in other studies of school quality. “Estimates… provide strong evidence, that in Texas, teachers employed in schools with high fractions of disadvantaged minority students have fewer years of education and less experience; they also have more students in their class” (Kain & Singleton, 1996, p.14).

While both of these schools had high percentages of minority students, one had more resources that the other as exhibited by per pupil expenditures of over $5000 per year more at one school than the other. This frustration was voiced by one of the principals who had lost staff from her low-performing school to a school in the district with more resources. “At the end of the year 2-3 teachers left and went to … centers where the numbers are smaller. Can’t blame them.” The inequality of resource and working conditions within one district will continue to make the retention and recruitment of needed quality personnel difficult for schools that struggle with student performance issues. If teachers are presented with an option to teach in a school with 14 students in a class or another school with 40 in a class as 1 principal reported, it would appear obvious that they would choose the smaller numbers. The schools with more resources can therefore be more selective in their selection, which allows them to hire the best teachers in the district. Teachers at schools with difficult circumstances are either extremely driven by a personal mission to make a difference, or not of high enough quality to be recruited by another school. The apparent confirmation of the impact teacher effectiveness has on student performance serves to make more tragic the effect of inequality that exists not just between urban and suburban schools, but also between schools within the same district.
Principal Leadership

The quantitative analysis did not reveal a level of significance between low and high-performing campuses that was statistically difference in their responses to Factor 1 questions about principal leadership. All principals indicated a belief in his or her value as an instructional leader, some more strongly than others. One administrator at a low-performing campus said flatly, “As principal, you have all the impact.” Similarly, Mosenthal, et al., (2004) found in a study of 6 successful schools that each one had “administrative and curricular leadership in literacy” (p.351). Reynolds and Teddlie (2000) found different behaviors in principals at low and high-achieving schools, with principals at high achieving schools more involved in instructional matters, while those at low-achieving schools were more likely to be involved in managerial and disciplinary issues.

This involvement in academic matters was found in many of the principals from both groups of schools, ranging from a principal at a high-performing campus who personally taught school-wide lessons each day and required assessments of the objectives taught to principals at low-performing campuses who monitored and regularly discussed with staff the instructional program of the school. Two of the administrators at low performing schools appeared to be intimately involved with the instructional program on their campus, as evidenced by their comments regarding meetings with teachers to address specific instructional concerns. At another low-performing campus, the principal admitted to having turned over most of the supervision of the instructional program to his assistant principal, but justified doing so because of the assistant principal’s strength in curriculum and instruction.

In reviewing the differences in styles between the different administrators, the group of interviewed principals seemed to range on a continuum from extremely controlling to fairly
relaxed. More than 1 discussed the importance of modeling the behavior they wanted to see in teachers and staff. Several principals talked about engaging staff in conversations, building capacity in them for learning and understanding the big picture of where the school was headed.

Providing opportunities for learning and collaboration for the staff was an area of leadership that provided insight into the beliefs of the interviewed administrators. Principals from both groups of schools indicated the importance of continual learning for their staffs, although different approaches were used. At 1 low-performing campus, the principal commented that vertical meetings should be the most powerful of all the meetings that were held, while at another low-performing campus, there was a structure in place for weekly meetings with specific instructional focus. At 1 high-performing campus, the principal began each faculty meeting with a mini-workshop, while another high-performing school had monthly grade level meetings that were designed to be focused on instructional issues.

All of the principals spoke about frequent interaction with their staff and students. While more principals at high-performing campuses spoke about visibility in the classrooms as important to them, there were also references to classroom visits by principals at low-performing campuses. One possible explanation for any difference that might be present in this area is that principals at low-performing campuses are dealing with issues that their more successful colleagues have already addressed, which may take their time and focus from monitoring classrooms as they would prefer. As their campuses work through issues that may be interfering with performance and improve, these principals may have additional time for classroom visits.

Another possible explanation for some of the perceived difference in reported classroom visits could be school size and accompanying demands on the administrator’s time. For example, one of the high-performing campuses has an enrollment of approximately 275 students with 3
administrators. One of the low-performing campuses has an enrollment of approximately 1,200 students with 4 administrators. While these represent the extreme from both groups, the administrator to student ratio varies from approximately 1:92 to 1:300 between these 2 schools, which could account for reduced time for visibility within classrooms as well.

Use of Data

The use of data made little difference between the 2 groups of schools either in the quantitative or qualitative analysis. A possible explanation for that is that 29 of the 30 schools were within the same district that had established both expectations and procedures for data analysis that essentially neutralized any differences in practices between high and low-performing campuses. It would be difficult to extrapolate any findings to other districts due to the uniform methods that have been implemented for data analysis within the studied urban district. Benchmark tests are given, students are provided early release days for teachers to analyze the data, and there is accountability from supervisory personnel to insure that data analysis is being done and that instructional planning is being driven by the data. It is not surprising that there was no significance between the 2 groups in this area.

It was rare for one of the high-performing schools in this district to comment about a change in the attitude of the staff toward the use of data. On the other hand, low-performing school administrators all remarked on the changes that had happened during the preceding 3 or 4 years in how staff used and viewed data. The conclusion that was drawn from this observation is that the higher performing schools were several years ahead of the lower performing schools in their implementation of this kind of data analysis, and now that the lower performing schools were doing the same kind of analysis, they were seeing positive results in student performance as
a result. That conclusion appears to support the hypothesis that the use of data is an important factor for improving student performance, even though the statistical analysis in this study did not support this conclusion. Strahan (2003) found “using data as the basis for dialogue” (p.135) had become a cultural norm in 3 North Carolina elementary schools that had shown significant improvement in the face of difficult circumstances, and each of the schools interviewed for the current study reported significant investments of time in data analysis and instructional improvement.

Principals at the 3 lower performing schools appear to have seen improvement in their school’s performance which they can tie to the increased use of data, and so it is a focus of their instructional leadership. Principals in both groups of schools reported using data to modify curriculum and instruction. It is apparent from the number of references to the use of data to see gaps or weaknesses that this is a worthwhile use of staff time, and therefore further reinforces the literature recommending the use of data for instructional improvement even though there was no statistically significant difference between schools in the current study.

Recommendations

For principals in schools with high incidences of poverty and high enrollment of African-American students, an intense focus on building positive relationships between staff members and students is recommended. Some of the methods used in schools who participated in this study were after school clubs or activities, as well as academic competitions that provided another avenue for student participation. These types of activities are found in many schools, but this study should impress upon administrators the importance that African-American students may place on these types of activities. Obstacles such as conflicts in schedules between extra
curricular activities and tutoring opportunities should be removed so that students have the opportunity to feel connected with school in ways that are important to them. Principals in high poverty schools, especially those with large numbers of African-American students, are encouraged to investigate the feasibility of providing numerous methods for engaging students and their parents in these types of activities.

Other recommendations for schools with high percentages of African-American students enrolled are inexpensive, although they do require time commitments from staff and others involved in the school. These include the importance of holding conversations with students, learning about students’ families and interests, mentoring students when appropriate, and other investments of time. Principals can influence this type of culture by continually stressing the importance of building relationships, and sharing the research that confirms the positive effect strong student teacher relationships can have on student performance.

The statistical analysis provided evidence that appears to confirm the importance of high expectations for schools that are serving high populations of African-American and economically disadvantaged elementary students. Principals in schools with similar populations are urged to focus the beliefs and behaviors of staff, parents and students on high expectations for performance. As reported by 1 principal who was interviewed for this current research, monitoring conversations of staff members to make sure that teachers are not falling into the habit of making excuses for students is an effective way of insuring that expectations for student performance continue to be strong. Other interviewed administrators routinely ask staff members what their goals are, and how they plan to get there. These conversations are not difficult to embed within the framework of conversations and can serve to keep an ongoing focus on the vision of the school for high achievement.
Data also provide some corroboration for the need for highly effective teachers in order to improve the performance of students at schools with high numbers of students who are economically disadvantaged and African-American. Principals at schools with similar populations should continue to follow the processes for removal of teachers who are not meeting their expectations for instructional capabilities. They should also work diligently to select and retain the best possible applicants for their campuses as possible.

While many campuses with high percentages of economically disadvantaged and African-American students are often more difficult to staff than other schools, it is possible for principals to create cultures that support and encourage teachers to remain in a building in spite of the issues that may be present. One principal from a low-performing campus reported that when he arrived at the campus 3 years earlier, the campus had been experiencing a 45-50% turnover rate each year. For this school year, he estimated his staff turnover at about 10-15% which has helped provide stability and strength to his instructional staff. Therefore, in spite of the financial and resource obstacles faced by high-poverty schools, it appears possible for the campus leader to create an atmosphere that fosters stability and commitment to a mission through constant focus on goals and the gains that have been achieved. This is concurrent with findings by Hipp and Bredeson (1995) who studied several hundred teachers and 10 principals for insight into principal behaviors that would increase teachers’ sense of personal efficacy. When teachers have a belief in the value of their work, they may be more likely to stay and continue to work on school improvement in spite of obstacles that may be present. Similarly, a study in North Carolina found that 1 of the top factors teachers cited in deciding to stay at a school was the leadership at the campus (Southeast Center for Teaching Quality, 2004).
Another recommendation for principals in large urban districts is that an awareness of the data provided through state reports can shed light on practices that may be commonly accepted but in need of correction such as the differences in per pupil dollars between schools in the same district. While the information provided on these types of reports is available to the public, it is commonly used to point out academic differences and not resource allocation discrepancies. However, when the disparities are as egregious as some discovered in this study, it would appear that this information could be shared with constituents and school board members who can influence policy and spending decisions.

For principals in buildings where the population of African-American economically disadvantaged students may not be large, the findings for several factors in this study are still applicable. The importance of student-teacher relationships was demonstrated through the review of literature and the quantitative and qualitative data analysis. Therefore, it seems apparent that principals in buildings with even small populations of African-American students who are economically disadvantaged will need to educate their staff as to the importance of building relationships. This is important for every child, but it is particularly important for students whose cultural styles make relationships more important than many other aspects of school. Modeling interactions that will positively impact African-American students, as well as increasing efforts to help faculty and staff understand the cultural importance of relationships to African-American students is an important function for a principal who may be faced with meeting the needs of a variety of learners. Sharing research and anecdotal information about the importance of building strong relationships can influence staff members who may be reluctant to invest the time and energy required for such relationship building.
Similarly, principals of buildings with small percentages of enrolled African-American students can impact the expectation level of staff members through their own language and behavior. Careful monitoring of staff talk and positive redirection over time can send the message that the culture of the building simply will not accept failure for any child regardless of obstacles that may exist.

Recruitment and retention of teachers is typically not as problematic in schools that have lower numbers of economically disadvantaged and ethnically diverse students, but principals in these schools can positively impact student performance by carefully attending to the assignment of students to teachers. Students who are economically disadvantaged are in need of the most qualified and experienced teachers, so it is imperative that building principals thoughtfully consider the placement of students so that the very best teachers are working with the most challenged learners.

Personnel who are assigned to the central administration at a district level should take particular note of the findings that are supplemental to the initial focus of the study. These additional findings include information about inequities in resource allocation between schools within districts, and that if all children are to be granted equal opportunities it is important for resources to be equitably applied. This may require decisions regarding reduction in the size of schools, which would involve increased capital expenditures as well as maintenance and operational increases. Attention should also be paid to the necessary level of per-pupil funding required to meet the needs of high poverty students. If different schools within 1 district are not provided similar resources to deal with similar issues, it would appear that schools with fewer resources are handicapped in their pursuit for excellence in education for their students.
If large urban districts are committed to providing an adequate education for all students, they must be able to provide assistance in recruitment and retention of quality staff, beginning with the building administrators. While it was apparent from the interviews conducted for this research that the interviewed principals were highly committed and dedicated, it was also apparent that they felt a great deal of pressure and possibly a lack of support for their efforts from those who supervise them. While district personnel are to be commended for making changes in the past that brought these capable individuals to their current positions, it is also important for them to continue to provide emotional and tangible support for building level administrators to be able to continue in these highly stressful positions.

Central administration officials also must commit themselves to recruitment and retention of quality instructional personnel. Efforts by building administrators to document ineffective teachers should be supported, not stymied. Districts should also provide innovative methods of enticing quality instructors to stay in challenging schools.

It would appear that schools benefit from a comprehensive approach to the use of data for instructional improvement. While there were no differences between improving and high-performing schools in this study in the use of data, that is most likely attributed to the systematic implementation of data analysis that has become a part of this district's procedures. Other urban districts that have not yet required systemic evaluation methods of student performance data should incorporate this practice into the standards for their district. However, they must also be prepared to provide the training, support and material resources necessary for making the study of data a realistic expectation.
Suggestions for Additional Research

The current study provides strong evidence that teacher effectiveness has a positive impact on school performance for African-American, economically disadvantaged students. Therefore, further study into the effective selection and retention of teachers at high poverty and high ethnically diverse campuses is recommended.

Another observation about the 2 groups of schools was that some had high populations of both Hispanic and African American students while other schools had high population of African-American students only. Further study might be warranted into the differences that are experienced between schools that are predominately 1 ethnicity versus those that have more than one cultural group to reach. The research might include a study into what methods are used to tailor instruction toward different cultural and learning styles on the same campus.

This study also pointed to the differences in principal styles. Some campus administrators appeared to be very controlling and others more collaborative. Future research might involve an analysis of the long-term impact of the differences in leadership styles on campus performance. One aspect might be whether controlling principals are able to sustain effectiveness differently than their more collaborative colleagues. Another facet might be differences between the 2 styles of leadership in employee morale and feelings of ownership among teachers for the school’s success.

This study appears to confirm existing research about the importance high expectations play in the success of African-American economically disadvantaged students. To learn specific means of fostering high expectations that are effective, additional research could be conducted into the types of school practices that are used on a regular basis to convey high expectations to students. In addition, a study of the processes used to involve all staff members in manifesting
high expectations for all students would be a practical exploration of this aspect of high expectations.

Class sizes have been an often researched and frequently misrepresented topic in educational journals. The disparities between schools observed during this research points to the possibility that class sizes do have an impact on student performance, even though budgetary restrictions usually preclude making classes smaller. Future research could be conducted to again examine the differences that result from class sizes that are markedly different.

An interesting and yet controversial topic for examination might be the factors that account for such great disparity in resources from school to school within a large district. Disparities noted in the current study included several factors such as class sizes, per pupil expenditures, and number of students and administrators per campus. Future research might seek to determine whether variables such as leadership at the central administration level create disparities among campuses in a large district. An additional topic might be how principals of schools who are not receiving similar allocations of resources work to change the inequity.
APPENDIX A

LETTER REQUESTING PARTICIPATION IN PILOT SURVEY
Dear ________________:

I am a doctoral student in the Educational Administration Department at the University of North Texas, as well as an elementary principal. In these roles, I am very interested in researching elements of schools that impact the performance of African American students who are economically disadvantaged.

In your role as a principal, I would like to ask that you take a few minutes to fill out the attached survey regarding your practices. This portion of my research involves piloting a survey that will be used with other principals in the near future. The completion of the survey should take no longer than 15 minutes, but the results will be very useful for analyzing differences that may impact student performance. Your participation is a critical element in helping design a survey instrument that will have a high degree of reliability for my research. Next to each question is a space for comments, and if you have observations about a question, please take the time to note your concern. I have enclosed a stamped, self-addressed envelope for your convenience.

This study does not involve any reasonably foreseeable risks, and all the results will be kept confidential. Names of participants will be known only to me, and school and personally identifying information will be eliminated before submission of the results.

If you have any questions about this research project, please call Wynette Griffin at 817-251-5713 or 817-456-7861, or Dr. Jane B. Huffman, UNT Educational Administration Program, at 940-265-2832.

Your participation in this survey is entirely voluntary, and you may discontinue your participation at any time. Your refusal to participate will involve no penalty or loss of benefits or rights.

I would like to thank you in advance for taking the time to complete this survey. I am anxious to receive input that may help schools improve their practices. As a thank you for your participation, a $5.00 donation will be made to the Tarrant County March of Dimes organization for each completed survey received.

Sincerely,

Wynette Griffin, M.Ed.
University of North Texas
APPENDIX B

RESEARCH PROPOSAL FORM FOR SCHOOL DISTRICT
Please carefully read the instructions you received as part of this packet. **To complete this form electronically, click on the § icon (it will appear §) and simply type in the information.** Include all items (a)-(e) with your submission (see the instructions for details on these items):

(a) Three (3) copies of this completed form (typed).

(b) Three (3) copies of an abstract (printed double spaced, not to exceed 2,500 words) including (but not limited to) the nature and rationale of the study, its primary supporting references in the literature, its need and expected applied or theoretical value.

(c) Three (3) copies of the “Informed Consent” form you will use for the study.

(d) One sample of each data collection instrument you plan to use for the study.

(e) The authorization from the Institutional Research Board of your institution (as required for studies involving human subjects) if applicable.

**For E-mail submissions, you must still send all additional materials and the signature page by mail.**

Submit all materials to:

<table>
<thead>
<tr>
<th>Office of Institutional Research</th>
<th>Telephone:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box 55, _________________________</td>
<td>Facsimile:</td>
</tr>
<tr>
<td></td>
<td>E-mail:</td>
</tr>
</tbody>
</table>

**Part I. Overview**

**A. Principal Investigator Information**
Name: Wynette Griffin ___________________________  Date Submitted: May 25, 2005

B. Complete if affiliated with an extra-district institution

| Institution: | University of North Texas ______________________________ |
| Address: | P.O. Box 311277 ______________________________ |
|           | Denton, TX 76203 ______________________________ |
| E-Mail Address: | ______________________________ wynette.griffin@gcisd.net |
| Telephone: | 817 251 5713 _______  Fax: 817 329 5618 _______ |

Can you receive confidential information on the fax number and E-mail address provided above? yes

C. Complete if affiliated with DISD (employees may need to complete both B and C)

| School/Department: | ______________________________ N/A |
| E-mail: | N/A |
| Telephone: | N/A _______  Fax: N/A _______  BOX: N/A__ |

Can you receive confidential information on the fax number and E-mail address provided above? N/A
Part II. Information About the Study

Study Overview

Study Title: School factors that impact African-American economically disadvantaged elementary students’ performance on state mandated criterion reference tests.
Area of Study: Elementary schools with above the state average enrollment of African American and economically disadvantaged students and different performance levels on TAKS tests.
Specific Topic: School factors to be examined include student/teacher relationships, expectations for academic performance, principal leadership, teacher effectiveness, and the use of data to inform instruction.

1. Major hypotheses/questions to be investigated:

What impact do the following factors have among effective and ineffective schools that enroll above the state average percentage of African-American and economically disadvantaged students?
- student/teacher relationships
- expectations for academic performance
- principal leadership
- teacher effectiveness
- the use of data to inform instruction.

2. Summary and rationale:

African American economically disadvantaged pupil performance historically lags behind White and Asian American student performance on the state mandated criterion referenced tests in Texas. Particularly in light of state and federal accountability requirements for all subpopulation groups, it is critical for educators to identify school practices that may positively impact the performance of economically disadvantaged African-American students.

It is hypothesized that schools where student/teacher relationships are warm and nurturing, where high expectations for academic performance are the norm for all personnel, that have strong principal leadership, who use data to inform instruction and where effective teachers are the norm will be more successful with African-American economically disadvantaged students as evidenced by performance on TAKS reading and math tests at the fifth grade level.

Population(s) or data desired (describe in detail):

56 schools that enroll above the state average percentage of African-American and economically disadvantaged students. 16 are identified as effective based on passing rates that are at or above the state average for fifth grade math and reading and 40 are identified as
ineffective based on passing rates below the state average at grade five reading and math TAKS.

3. Titles of instruments (forms, questionnaires, tests, etc.) to be used for data collection:
   Researcher created survey (attached electronically, also sent by mail) detailing five areas of interest:
   student/teacher relationships: 11 questions
   expectations for academic performance: 14 questions
   principal leadership: 11 questions
   teacher effectiveness: 12 questions
   the use of data to inform instruction: 11 questions.
   Each question is designed as a “Likert” type rating scale, with four response choices: strongly agree, agree, disagree, and strongly disagree.
   After the initial survey, five principals from each group of schools (for a total of ten principals) will be selected for one-hour interviews to explore the identified areas in more detail.

4. Procedures planned for implementing treatment(s), administering instruments, and/or collecting data from school records:
   A principal survey will be sent electronically or via regular mail to principals at each of the 56 schools. After analysis of the survey results, a more in-depth interview will be conducted with 4 principals from the ineffective and 4 principals from the effective group, to identify patterns of behavior that impact student performance.

5. Design and statistical techniques planned for data analysis:
   A canonical correlational design is planned for the quantitative section of the research, using multiple regression techniques to compare responses between the 2 groups. A qualitative design will be implemented for part 2 of the study, which will consist of a one-hour structured interview with a sample of ten principals. These interviews will be transcribed, coded, and analyzed for patterns that may yield insight into the differences between effective and ineffective schools.

6. Expected beginning date and completion date of study:
   Anticipated beginning date for survey administration is late June, 2005 with a projected completion of early August. In-depth interviews will be arranged with consenting principals at their convenience during July-September of 2005.

7. Form in which findings will be reported:
Dissertation submitted to the University of North Texas for completion of the degree of Ed.D. in Educational Administration.

I, the applicant, do hereby agree that I will abide by the policies and regulations of the Dallas Independent School District and will furnish a copy of the abstract and report describing the findings of the study to the DISD Office of Institutional Research.

Signature of Applicant

Date

If you are presently a student, please ask the professional sponsoring your research (e.g., major professor, chairperson of your advisory committee, department head, etc.) to sign the following:

I am familiar with the proposed study and feel that the researcher submitting this proposal is professionally qualified to undertake the investigation. I also believe the research design to be valid and appropriate.

Signature of Sponsoring Professional/Advisor

Associate Professor
Position or Title

University of North Texas, College of Education, Department of Educational Administration
Name of Institution and Department
Part III. Signatures

(For electronic submission, this page with the original signatures must be sent also by regular mail.)

Applicant

Sponsoring Professional

Contact Person for Coordination (optional)

If you have a district employee willing to coordinate the study, please provide the following information:

Name: §
Title: §
Dept: §
Box: §
Phone: §
Fax: §
APPENDIX C

LETTER REQUESTING SURVEY PARTICIPATION
Dear ________:

I am a doctoral student in the Educational Administration Department at the University of North Texas, as well as an elementary principal. In these roles, I am very interested in researching elements of schools that impact the performance of African-American students that are economically disadvantaged.

In your role as a principal in the [___] Independent School District, I would like to ask that you take a few minutes to fill out the attached survey regarding your practices. The completion of the survey should take no longer than 10-12 minutes, but the results will be very useful for analyzing differences that may impact student performance. Your participation is a critical element in furthering my understanding of the attributes that may impact economically disadvantaged African-American student achievement. I believe that increasing the understanding of school factors could provide insight into ways to increase the academic performance of economically disadvantaged African-American students.

This study does not involve any reasonably foreseeable risks, and all the results will be kept confidential. Names of participants will be known only to me, and school and personally identifying information will be eliminated before final submission. Pseudonyms will be used for schools in the final report, and survey results will be aggregated. Permission has been obtained from the [___] Independent School District for this research to be carried out in [___] schools.

If you have any questions about this research project, please call Wynette Griffin at 817-251-5713 or 817-456-7861, or Dr. Jane B. Huffman, UNT Department of Educational Administration at 940-265-2832. This study has been approved by the University of North Texas Institutional Review Board (IRB). If you have any questions about your rights as a research participant, you may contact the UNT IRB at (940) 565-3940 or sbourns@unt.edu.

Your participation in this survey is entirely voluntary, and you may discontinue your participation at any time. Your refusal to participate will involve no penalty or loss of benefits or rights.

I would like to thank you in advance for taking the time to complete this survey. I am anxious to receive input that may help schools improve their practices. A copy of the results of this research will be made available to you and to the district at your request.

Sincerely,

Wynette Griffin, M.Ed.
APPENDIX D
SURVEY QUESTIONS
1. Teachers in our school expect all their students to pass TAKS.
2. Teachers in our school rarely hug students or demonstrate affection to them.
3. Teachers in our building are skilled at reaching challenging learners.
4. Our campus improvement plan is based on student achievement data.
5. Teachers in our school value relationships with students.
6. Teachers in our school are not surprised when students perform at high levels.
7. Teachers in our school struggle with analyzing student achievement data.
8. Teachers in our school see me in their classroom at least once a week.
9. Teachers in our school provide students with emotional support.
10. As a group, I consider the instructional skill of teachers at TAKS grades in our school to be average.
11. It is unusual for teachers to have conversations with me or with other staff members about student assessment data.
12. When I walk into a classroom, I'm not always sure if the objective being taught is part of the grade level TEKS.
13. Teachers in our school demand high performance from their students all the time.
14. Most classroom environments in our building would be labeled warm and supportive.
15. I would gladly have my own child or grandchildren taught by teachers at this school.
16. Teachers in our building feel that we spend too much time assessing students and that testing takes away from instructional time.
17. The majority of my time is spent on administrative kind of tasks.
18. Everyone in our school feels responsible for improving student learning.
19. Teachers in our school don't spend time developing relationships outside class with students.
20. Most teachers in our building are rated *exceeds expectations* on PDAS.
21. We administer assessments other than TAKS to provide information on student progress in reading and math.
22. Teachers in our school feel that some students have significant obstacles that prevent them from being successful.
23. A child with a problem would most likely go to someone other than their teacher for help.
24. Teachers in our building frequently access and utilize data in planning instruction.
25. Parents are not satisfied with the academic performance of students at our school.
26. Students at our school know their teacher cares about them.
27. Due to their expertise, teachers at our school could move to schools with fewer educationally disadvantaged students but choose to stay at our school.
28. Teachers make decisions about instruction based on student performance on assessments.
29. As principal, I am actively involved in instructional planning and implementation.
30. On average, teachers at TAKS grades in our building have more than five years teaching experience.
31. Teachers at our school follow the curriculum without regard to data on student performance.
32. When I walk into a classroom, I can determine if the strategies being used are appropriate for the grade and subject being taught.
33. Teachers at our school expect high levels of performance from themselves.
34. Teachers at our school rarely go out of their way to involve themselves in their student's lives above and beyond the school's expectations.

35. Teachers at our school have little time to problem-solve instructional issues with their colleagues.

36. Instructional support services for students rarely change after benchmarks or other assessments are given.

37. The majority of my conversations with teachers about their teaching occur during summative conferences.

38. Teachers at our school expect high levels of performance from their colleagues.

39. In our building, it is common to hear statements such as "They have no support at home" or "The parents just aren't involved" as teachers discuss student performance.

40. Teachers, either formally or informally, serve as mentors to students.

41. Teachers in our school are sometimes unable to do their best work because of district demands.

42. In our building, teachers expect students to turn in quality work and do their best.

43. To assist in meeting the non-academic needs of their students, teachers share information with parents about community or district resources.

44. Some teachers in our building do not know the grade level TEKS and district level curriculum requirements.

45. If students in our building are not successful, teachers often attribute it to outside factors.

46. Benchmarks and other assessments do not provide the information we need to help our students.

47. There is a high rate (more than 30% per year) of staff turnover at our school.

48. Teachers in our building know that I will ask them about student performance on assessments.

49. Faculty meetings are used primarily for school business and to share information.
APPENDIX E

STRUCTURED INTERVIEW QUESTIONS
Opening questions:

- Tell me about yourself (experience, beliefs, behaviors)
- Tell me about your school

Use of data

- How would you describe changes in your staff’s use of data over the last 3-5 years?
- What difference do you see between grade levels within the school in the use of data for instructional improvement?
- Can you share specific examples of practices in data analysis that impact instruction and student performance?

Principal leadership:

- What do you feel is the most significant contribution/impact you have on student achievement?
- How do you feel your staff would describe your participation in your school’s instructional program?
- What learning or sharing occurs during faculty meetings or other staff meetings?
- What goals do you have for your school’s academic achievement that you have not yet met?
- What is your vision or plan for changing that?
- What supports do you provide to assist teachers in increasing their effectiveness?

Teacher effectiveness:

- What evidence have you collected that lets you know your teachers are maximizing their efforts to improve student achievement?
- Tell me about the teacher you would consider the “most effective” teacher in grades 3-5.
- What kind of influence do they have in the building?
- How would you describe that teacher’s relationships with his/her students?
- On a scale of 1 to 5, with 1 being nothing like that teacher and 5 being exactly like that teacher, how would you compare the other teachers in grades 3-5 to that teacher?
- Tell me about your least effective teacher in grades 3-5.
- On a scale of 1 to 5 with 1 being nothing like that teacher and 5 being exactly like that teacher, how would you compare your other teachers to that ineffective teacher?
Student teacher relationships:

- What kinds of things do you regularly see/ hear from teachers about their relationships with students?
- What percent of your teachers interact outside school with students? What do you see them doing?
- What types of activities do you see on a regular basis from teachers in your building that actively promote relationships with students?
- Outside of the classroom, what do you regularly see teachers or other staff members do to build relationships with students?
- If they were very honest with you, how do you think the majority of your staff would respond to this statement, “They won’t care to learn until they learn how much you care?”
- Of those who agreed, what do they do to make sure students “learn how much they care?”
- Of those who didn’t agree, what differences would you notice between their classrooms and the classrooms of those who would agree?

High expectations:

- How would you compare the expectation for student performance of the staff at your school to other schools you may have worked in?
- What evidence do you see or how do you know that this is different at this school than other schools?
- What is a “common” reaction to a student’s poor performance by your staff? How does that vary from staff member to staff member?
- What impact do you think the expectation level of your staff has on student performance at your school?
- What changes, if any, have you seen from staff members in response to increased accountability at the state and local levels?
- As a principal, how do you measure whether or not you are successful?
- As a principal, how do you measure whether or not a teacher at your school is successful?
- As a principal, how do you measure whether or not a student at your school is successful?
- As a principal, how do you measure whether or not your school is successful?
APPENDIX F

CATEGORIES FOR QUALITATIVE INTERVIEWS
Leadership

L1: Instruction program involvement
L2: Accountability
L3: Visibility
L4: Staff development
L5: Providing resources
L6: Inspiration
L7: Style/characteristics

Data

D1: Data used for grouping
D2: Data used for curriculum instructional improvement
D3: Mechanics of analysis
D4: Change in staff’s use of data
D5: Data for campus improvement

Teacher Effectiveness

TE1: Characteristics
TE2: Time commitment to students
TE3: Expectations of students
TE4: Instructional expertise
TE5: Experience
TE6: Building relationships with students
TE7: Classroom management
TE8: Ineffective teachers

Student/Teacher Relationships

STR1: Providing for material needs
STR2: Time investment in students
STR3: Approaches/strategies
STR4: Response from students

High Expectations

HE1: Impact on campus
HE2: Change over time
HE3: Principal role in high expectation
HE4: Manifestation of high/low expectation on campus
APPENDIX G

FACTOR 1 SURVEY QUESTIONS BY CATEGORY
High Expectations
33. Teachers at our school expect high levels of performance from themselves.
13. Teachers in our school demand high performance from their students all the time.
18. Everyone in our school feels responsible for improving student learning.
39. In our building, it is common to hear statements such as "They have no support at home" or "The parents just aren't involved" as teachers discuss student performance.
45. If students in our building are not successful, teachers often attribute it to outside factors.
42. In our building, teachers expect students to turn in quality work and do their best.
6. Teachers in our school are not surprised when students perform at high levels.
38. Teachers at our school expect high levels of performance from their colleagues.

Teacher Effectiveness
15. I would gladly have my own child or grandchildren taught by teachers at this school.
27. Due to their expertise, teachers at our school could move to schools with fewer educationally disadvantaged students but choose to stay at our school.
3. Teachers in our building are skilled at reaching challenging learners.
30. On average, teachers at TAKS grades in our building have more than five years teaching experience.
47. There is a high rate (more than 30% per year) of staff turn-over at our school.

Principal Leadership
12. When I walk into a classroom, I'm not always sure if the objective being taught is part of the grade level TEKS.
29. As principal, I am actively involved in instructional planning and implementation.
32. When I walk into a classroom, I can determine if the strategies being used are appropriate for the grade and subject being taught.
8. Teachers in our school see me in their classroom at least once a week.
37. The majority of my conversations with teachers about their teaching occur during summative conferences.
**Student Teacher Relationships**

26. Students at our school know their teacher cares about them.
14. Most classroom environments in our building would be labeled warm and supportive.
40. Teachers, either formally or informally, serve as mentors to students
43. To assist in meeting the non-academic needs of their students, teachers share information with parents about community or district resources.
34. Teachers at our school rarely go out of their way to involve themselves in their student's lives above and beyond the school's expectations.
2. Teachers in our school rarely hug students or demonstrate affection to them.

19. Teachers in our school don't spend time developing relationships outside class with students.
9. Teachers in our school provide students with emotional support.

**Use of Data**

4. Our campus improvement plan is based on student achievement data
21. We administer assessments other than TAKS to provide information on student progress in reading and math.
24. Teachers in our building frequently access and utilize data in planning instruction.
28. Teachers make decisions about instruction based on student performance on assessments
REFERENCES


Rowan, B., Correnti, R., Miller, R.J. (2002). What large-scale, survey research tells us about teacher effects on student achievement: Insights from the Prospects study of elementary schools. *Teachers College Record, 104*(8), 1525-1567.


