

The Relationship Between the Percentage of African-American Teachers on Public
School Secondary Campuses and the Percentage of African-American Students Passing
the Texas Assessment of Knowledge and Skills test (TAKS)

by

Victor S. Nixon

Liberty University

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Liberty University

September, 2010

The Relationship Between the Percentage of African-American Secondary Teachers
and the Percentage of African-American Secondary Students
Passing the Texas Assessment of Knowledge and Skills test (TAKS)
by Victor S. Nixon

APPROVED:

COMMITTEE CHAIR

Shante' Moore-Austin, Ph.D.

COMMITTEE MEMBERS

Bonnie Barrett, Ph.D.

Sally H. Childs, Ed.D.

CHAIR, GRADUATE STUDIES

Scott B. Watson, Ph.D.

Abstract

Victor Sterling Nixon, THE RELATIONSHIP BETWEEN THE PERCENTAGE OF AFRICAN-AMERICAN SECONDARY TEACHERS AND THE PERCENTAGE OF AFRICAN-AMERICAN SECONDARY STUDENTS PASSING THE TEXAS ASSESSMENT OF KNOWLEDGE AND SKILLS TEST (TAKS). (Under the direction of Dr. Shante' Moore-Austin) School of Education, September 13, 2010.

No Child Left Behind has caused educators to take a critical look at the achievement levels of all population groups on campus. African-American student achievement can no longer be masked by the achievement levels of other student populations. Educators must develop strategies to reduce the African-American achievement gap in order to meet Adequate Yearly Progress. This study examined the relationship between the percentage of African-American teachers on secondary Texas campuses and African-American student achievement. Academic achievement was measured by the use of the Texas Assessment of Knowledge and Skills Test (TAKS). The American College Test (ACT) and the Scholastic Aptitude Tests (SAT) were used as well. Bivariate Spearman correlations were conducted on all testing categorical data. The results of the study indicated either a significant negative relationship or no significant relationship at all between the percentage of African-American teachers and the percentage of African-American secondary student's achievement as measured by the TAKS, ACT, and SAT assessments.

Acknowledgements

This academic endeavor is the culmination of years of learning not only about the subject matter but also about me and how important relationships are in my life. This study would not be possible without the following relationships:

First and foremost to God for his grace and for being with me during this academic endeavor and throughout my life. *I will be strong and courageous. I will not be terrified, or discouraged; for the Lord my God is with me wherever I go. Joshua 1:9*

To my committee chair Dr. Shante Moore-Austin for having the patience to answer countless questions and for being an encouraging voice when I hit numerous stumbling blocks along the way.

To my committee members Dr. Sally Childs for encouraging me during this process and for her attention to detail and to Dr. Bonnie Barrett for serving as a role model for me for many years and her encouragement.

To my faculty advisor Dr. Scott Watson for starting me on the right track for course selections and for my introduction to Liberty University.

To my understanding wife Annabel Nixon who served as my proofreader, sounding board, friend, and ultimate cheerleader.

To my parents Samuel Nixon and Barbara Nixon for instilling in me the value of education at an early age.

Finally to the United States Army for providing me opportunities to expand my mind by allowing me to experience different cultures and different educational opportunities throughout the nation and world.

CONTENTS

INTRODUCTION.....	1
Chapter 1: Statement of the Problem.....	1
Objectives of the Study.....	3
Statement of the Hypothesis	3
Research Questions	4
Significance of the study.....	8
Definition of Terms.....	8
Organization of the Study	10
Chapter 2: Literature Review.....	12
Theoretical Framework.....	12
Relationships and Mentorships	13
The Achievement Gap	23
Solutions to Close the Achievement Gap	28
Subject Areas	29
Causes of Achievement Gaps in Math.....	32
Achievement Gaps in Reading.....	34
Achievement Gaps in Science	36
Perceptions, Expectations and Beliefs	38
Special Program Referrals	45
No Child Left Behind.....	52

Summary	56
Chapter 3: Methodology.....	58
The General Perspective	58
Research Questions and Hypothesis	58
The Research Context.....	62
The Research Participants.....	63
Instruments Used in Data Collection	65
Procedures Used.....	71
Data Analysis	75
Data Organization	75
Statistical Procedures	75
Summary	76
Chapter 4: Results.....	78
Research Question 1	79
Research Question 2	82
Research Question 3	85
Research Question 4	88
Research Question 5	90
Research Question 6	92
Research Question 7	95
Chapter 5: Summary and Discussion.....	98
Statement of The Problem	98

Review of methodology.....	98
Summary of the Results	99
Discussion of the Results	101
Relationship of the Current Study to Previous Research.....	108
Implications of the Study	110
Limitations of the Study.....	111
Recommendations for Futher Research	113
Conclusion	113
Bibliography.....	115
APPENDIX A: Texas Education Service Center Region Maps.....	131
APPENDIX B: Ethnic Breakdown of Region 10 TAKS Pass Rates.....	134
APPENDIX C: 2005-2008 Texas Education Agency Accountability Ratings.....	138
APPENDIX D: 2008 Sample Snapshot AEIS Report.....	141
APPENDIX E: TAKS Performance Standards 2006-2008.....	145
APPENDIX F: TAKS 2006-2008 Item Analysis.....	150
APPENDIX G: Campus Academic Challenge Factors.....	158
APPENDIX H: Raw Data.....	155

LIST OF TABLES

Table 1: Descriptive Statistics for Middle School Student Demographics.....	78
Table 2: Descriptive Statistics for High School Student Demographics.....	79
Table 3: Descriptive Statistics for Research Question 1.....	81
Table 4: Spearman Correlations for Middle School Total Scores.....	82
Table 5: Spearman Correlations for High School Total Scores.....	82
Table 6: Descriptive Statistics for Research Question 2.....	83
Table 7: Spearman Correlations for Middle School Reading / ELA Scores.....	84
Table 8: Spearman Correlations for High School Reading / ELA Scores.....	85
Table 9: Descriptive Statistics for Research Question 3.....	86
Table 10: Spearman Correlations for Middle School Math Scores.....	87
Table 11: Spearman Correlations for High School Math Scores.....	87
Table 12: Descriptive Statistics for Research Question 4.....	89
Table 13: Spearman Correlations for Middle School Science Scores.....	90
Table 14: Spearman Correlations for High School Science Scores.....	90
Table 15: Descriptive Statistics for Research Question 5.....	91
Table 16: Spearman Correlations for Middle School Writing Scores.....	92
Table 17: Descriptive Statistics for Research Question 6.....	94
Table 18: Spearman Correlations for Middle School Social Studies Scores.....	94
Table 19: Spearman Correlations for High School Social Studies Scores.....	94

Table 20: Descriptive Statistics for Research Question 7.....	96
Table 21: Spearman Correlations for SAT & ACT Scores.....	96

LIST OF FIGURES

Figure 1. TAKS Grade Subject Chart.....	68
---	----

CHAPTER I

Introduction

Statement of the Problem

This research study will examine the relationship between the percentage of African-American teachers on secondary public school campuses and the percentage of African-American students passing the Texas Assessment of Knowledge and Skills test (TAKS) on those campuses. The TAKS test measures the statewide curriculum in reading, science, social studies, writing and math. Secondary grades 6th through 11th are tested. It is an established fact that there is a nationwide achievement gap between African-American students and white students. According to Lee (2006), the achievement not only exists but actually began to widen during the 1990's (p.12). This is also true for the state of Texas. The 2007 Academic Excellence Indicator System Statewide Performance Report showed that in grade 6, 88% of White students passed all areas of the TAKS test compared to 65% of African-American students passing all areas of TAKS test. In grade 7, 83% of White students passed all areas of the TAKS test compared to 57% of African-American students passing all areas of TAKS test. In grade 8, 78% of White students passed all areas of TAKS compared to 44% of African-American students passing all areas of TAKS. In grade 9, 77% of White students passed all areas of the TAKS test compared to 45% of African-American students passing all areas of the TAKS test. In grade 10, 68% of White students passed all areas of the TAKS test compared to 32% of African-American students passing all areas of the TAKS test. In grade 11, 84% of White students passed all areas of the TAKS test compared to 53% of African-American passing all areas of the TAKS test. (Academic Excellence Indicator System 06-07) This

data clearly shows that there is a significant gap between White students passing all areas of TAKS and African-American students passing all areas of TAKS. There is also a gap in the percentages of African-American teachers in Texas.

Out of the total student population in the state of Texas, 14.4% of the students are African-American and 35% are white. Out of the total teacher population, 9.3% of the teachers are African-American and 68.5% are white. (Academic Excellence Indicator System 06-07) There is clearly a discrepancy in the percentage of African-American teachers in Texas. Is there a relationship between the percentage of African-American teachers on a given campus and African-American students passing the TAKS test? This question must be explored due to the provisions of No Child Left Behind (NCLB) evaluating school district's Annual Yearly Progress (AYP). AYP considers progress of specific student groups. Each student group must make progress on the TAKS test eventually leading to 100% of all tests passed by all student groups by the 2013-2014 school year (2007 Texas AYP Guide). The student groups considered for AYP are African-American, Hispanic, White, Economically Disadvantaged, Special Education, and limited English Proficient. Each group must individually make AYP. In 2007, 60% of each student group must pass the reading TAKS test or show a 10% decrease in percent not proficient and show improvement in graduation rate or attendance. 50% of each student group must pass the math TAKS test or show a 10% decrease in percent not proficient and show improvement in graduation rate or attendance. The consequences for not meeting AYP for two consecutive years consist of students being offered a choice of transferring to another public school. Failure to meet AYP for three consecutive years consists of the previous mentioned transfers and supplemental educational services

including private services. Failure to meet AYP for four consecutive years consists of all consequences listed previously and the school undergoing outside corrective actions which may include replacement of staff or implementing a new curriculum. Failure to meet AYP for five and six consecutive years consists of all consequences previously listed and the school must plan and implement restructuring and governance changes. Failure of any student group making AYP has a major impact on the school and the education of the student (2007 AYP Guide).

It is imperative that the achievement gap between African-American students and White students be examined and properly addressed. It is not enough to just measure the achievement gap but to implement possible strategies to help close the gap. It is also important to eliminate concepts or ideas that are not related statistically to the achievement gap. This proposed research study will objectively examine the relationship between the percentages of African-American teachers on secondary campuses and the percentage of African-American students passing the Texas Assessment of Knowledge and Skills test (TAKS).

Objectives of the Study

The objective of the study is to determine if there is a significant relationship between the academic achievement of African-American students and the percentage of African-American teachers on a given campus.

Statement of the Hypothesis

Is there a significant relationship between the percentage of African-American teachers on secondary public school campuses and the percentage of African-American students passing the Texas Assessment of Knowledge and Skills test (TAKS) on those

campuses? The hypothesis for the study proposes that there is a positive relationship between the percentage of African-American teachers on a public school campus and the percentage of African-American students passing all subjects of the Texas Assessment of Knowledge and Skills (TAKS) test. In other words the higher the percentage of African-American teachers on campus, the higher the percentage of African-American students passing all subjects of the TAKS tests. The study also proposes a positive significant relationship between the percentage of African-American teachers and average SAT and ACT scores as well. This hypothesis is based on previous research studies which stressed the importance of racial congruence, mentoring, and the perceptions and lack of training of some White teachers teaching African-American students.

Research Questions

The following questions will guide this study:

1. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing all TAKS tests for their grade level?

H₁: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing all TAKS tests for their grade level.

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing all TAKS tests for their grade level.

2. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their reading / English language arts TAKS test?

H₁: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their reading / English language arts TAKS test.

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their reading / English language arts TAKS test.

3. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS math test?

H₁: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS math test.

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS math test.

4. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS science test?

H1: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS science test.

H0: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS science test.

5. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS writing test?

H1: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS writing test.

H0: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS writing test.

6. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS social studies test?

H1: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS social studies test.

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS social studies test.

7. Is there a significant relationship between the percentage of African-American teachers on a given campus and average African-American student's scores on the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT) test?

H₁: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students scores on the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT) test.

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students scores on the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT) test.

Significance of the Study

The problem addressed in this study is extremely important to public school educators at all levels. There is a well documented achievement gap between African-American and white students. The tenants of No Child Left Behind mandate that all school sub-populations succeed academically. Each subpopulation must be examined and evaluated separately. No population or populations can mask the lack of achievement of another. Strategies to increase achievement must be developed to target specific sub-populations such as African-American. The results of this study will have an impact on educators at the state, region, district, and campus levels.

This study will be able to provide information that may help increase achievement of African-American students and help close or shorten the achievement gap. The study will be valuable to educators making staffing decisions at the district and campus levels. It may also be beneficial to teacher preparation and certification programs as well. Educators will be able to analyze how the percentage of African-American teachers on a campus impacts African-American student achievement. As a result of this study educators will be able to positively impact the achievement of their African-American Students.

Definition of Terms

1. Academic Excellence Indicator System (AEIS) – The system (AEIS) pulls together a wide range of information on the performance of students in each school and district in Texas every year. This information is put into the annual AEIS reports, which are available each year in the fall. The performance indicators are: Results of Texas Assessment of Knowledge and Skills (TAKS); by grade, by subject, and by all grades tested. (retrieved January, 25, 2009, from
<http://ritter.tea.state.tx.us/perfreport/aeis/about.aeis.html>, AEIS Overview)
2. Achievement Gap – The difference in academic achievement between different ethnic groups.
3. African-American – “A person having origins in any of the black racial groups of Africa, not of Hispanic origin” (Horn, 1996, p.52).
4. Annual Yearly Progress (AYP) – Under the accountability provisions in the No Child Left

Behind (NCLB) Act, all public school campuses, school districts, and the state are evaluated for Adequate Yearly Progress (AYP). Districts, campuses, and the state are required to meet AYP criteria on three measures: Reading/Language Arts, Mathematics, and either Graduation Rate (for high schools and districts) or Attendance Rate (for elementary and middle/junior high schools) (2008 AYP Guide, p.16).

5. At-Risk – a student at risk of dropping out of school" includes each student who is under 21 years of age.
6. Economically disadvantaged – Students eligible to participate in the federal free and reduced price lunch program or for other public assistance. Used to determine family income levels (Academic Excellence Indicator System, 2008, p.15).
7. High School – Secondary schools with grades nine thru twelve.
8. Hispanic-American – A person of Mexican, Puerto Rican, Cuban, Central or South America or other Spanish culture or origin, regardless of race" (Horn, 1996, p.52).
9. Intermediate Center – Schools with grades five and six.
10. Junior High School – Secondary schools with grades seven thru eight.
11. Limited English Proficient – These are students identified as limited English proficient by the Language Proficiency Assessment Committee (LPAC) according to criteria established in the Texas Administrative Code (Academic Excellence Indicator System, 2008, p.18).
12. Middle School – Secondary schools with grades six thru eight.
13. Ninth Grade Center – Secondary schools with ninth grade only.
14. No Child Left Behind (NCLB) – Federal legislation signed into law in 2002. No Child

Left Behind requires all public schools administer a state-wide standardized test annually to all students. Schools must make Adequate Yearly Progress in test scores each year. (NCLB Desktop Reference, 2002,p. 9).

15. Senior High School – Secondary schools with grades eleven and twelve.
16. Special Education – This refers to the population served by programs for students with disabilities. Assessment decisions for students in special education programs are made by their Admission, Review, and Dismissal (ARD) committee (Academic Excellence Indicator System, 2008,p.23).
17. Texas Assessment of Knowledge and Skills – A standardized test used to measure the academic achievement of Texas public school students in grades three to eleven. Subjects tested include reading, math, writing, science, social studies, and English language arts.
18. White-American – “A person having origins in any of the original peoples of Europe, North Africa, or the Middle East not of Hispanic origin” (Horn, 1996, p.52).

Organization of the Study

Chapter one contains an introductory examination of the relationship between the percentage of African-teachers on secondary school campuses and the percentage of African-American students passing the Texas Assessment of Knowledge and Skills (TAKS) test. The chapter also contains the statement of the problem, objectives of the study, research questions, significance of the study, and definition of terms. Chapter Two contains a review of the related literature. Chapter Three explains the methodology of the study including identifying the subjects and procedures. Chapter Four will present the

data used to conduct the study including organization. Chapter Five will present a summary of the findings of the study, a discussion of the implications of the study, and recommendations for future research.

CHAPTER II

Literature Review

An enormous amount of research has been conducted on the academic discrepancies between African-American students and white students. Research directly related to the relationship between student achievement and the ethnicity of their teachers has also been extensively researched. This literature review will discuss the relationship between African-American student's academic achievement and their teacher's ethnicity, closing the achievement gap, the achievement gap in subject areas, teacher's perceptions and or beliefs pertaining to ethnicity, the role ethnicity plays in referral to special education and gifted and talented programs, and the effects of No Child Left Behind on the achievement gap.

Theoretical Framework

This proposal is based on the tenants of social learning theory. The process of identification is critical to the personality development of students. When students identify with another person or group of people, they adopt their characteristics, beliefs, attitudes, values, and behaviors (Papalia & Olds, 1989). Identifying with a positive role model such as a teacher should result in positive outcomes. Conversely, identifying with negative role models may lead to negative outcomes. African-American students like all students should be afforded the opportunity to identify with positive role models while in school. The effectiveness and strength of the identification process with role models is often times predicated on what characteristics both participants have in common.

African-American students must be given the opportunity to be associated with African-American teachers in school. Karunananayake and Nauta (2004) stated that a role

model will be inspirational only to the degree that a person is able to identify similarities with that role model. Zirkel discovered that students who had one race and gender matched role models exhibited better academic performance and had more achievement related goals than students who did not. Another important aspect of social learning theory is the development of self efficacy.

Self-efficacy behaviors are behaviors that can be learned through modeling. According to Bandura (1995), self-efficacy is the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations. Self-efficacy is a person's belief in his or her ability to succeed in a particular situation. Observing other people successfully completing a task is an important source of self-efficacy. According to Bandura (1994), observing people similar to oneself succeed by sustained effort raises observers' beliefs that they too possess the capabilities to master comparable activities to succeed. This increases self-efficacy. Students with a high sense of self-efficacy achieve more in school than students with a low sense of self-efficacy. African-American students who have the opportunity to observe African-American teachers successfully completing tasks in school may increase their own self-efficacy. Tenants from social learning theory provide the theoretical framework for this proposed study.

Relationships and Mentorship

The relationship between a student and teacher plays a critical role in a student's academic achievement and overall success in school. After conducting a comprehensive review of literature on school programs for African-American males, Ascher (1994) suggests that many African-American students would choose to be absent from class than

attend class with a disliked teacher. Corbett and Wilson (2002) contend that developing and maintaining meaningful teacher relationships with African-American students can improve their academic achievement and persistence. The study consisted of interviews with inner-city adolescents about school-reform efforts and the qualities of good teachers. Longitudinal data suggest that when positive teacher– student relationships are not established, declines in achievement occur, and there is evidence that negative teacher– student relationships are related to a decline in achievement test scores even when taking IQ into account (Hamre & Pianta, 2001; Midgley, Feldlaufer, & Eccles, 1989). Effects from the relationships between teachers and African-American students have a significant impact on their future achievement. Teacher–student relationship quality assessed in kindergarten had an impact on achievement up to 8 years later, (Hamre & Pianta, 2001). This study followed a sample of 179 children from kindergarten through eighth grade to examine the extent to which kindergarten teachers' perceptions of their relationships with students predict a range of school outcomes. Supportive relationships are extremely important and have an impact on achievement. African- American students are less likely than white students to have supportive relationships with teachers than white students (Entwistle & Alexander, 1988; Hamre & Pianta, 2001; Ladd et al., 1999; Wehlage & Rutter, 1986). According to Hughes and Kwok (2007), the factors contributing to these differences are not known; the fact that the teacher workforce is predominantly white may contribute to racial differences in teacher–student relationship quality. This may have a negative effect on African-American students. Martinez (1991) stated that the lack of teachers of color provides little incentives for minority students to persist and advance in school. African-American teachers have a positive

effect on the achievement of African-American students. Klopfenstein (2005) discovered that increasing the percentage of math teachers who are African American had a nontrivial, positive impact on the likelihood that an African-American geometry student would enroll in future rigorous math courses. He emphasized the mentorship role of African-American math teachers encouraging African-American students to enroll in rigorous math courses (p.426). Klopfenstein studied African-American high school students from Texas public schools during the 1997-1998 school year. He measured the number of African-American high school students who enrolled in higher math courses based on their teacher's race. This is especially significant because Hoffman and Charmaine (2003) reported that in 1998, African-American students were less likely than white students to take advanced mathematics courses and some advanced science courses and less likely than Hispanic students to take advanced foreign language classes (p.12). They disaggregated this information from numerous reports published by the National Center for Educational Statistics from 1998 to 2002. This phenomenon has a huge impact on college entrance and college choice. Data suggests that students who complete advanced math and science also score higher on the SAT (Silver, 2000). Given the importance of being academically prepared for college coursework, many African-American students have not been exposed to the curriculum necessary for them to be successful in college (Harvard's Civil Rights Project, 2004). Mentoring African-American students to take higher level courses could help alleviate the problem.

Mentoring has a significant effect on African-American student success. Milner (2006) stated that "students see the possibilities of their futures by the mentoring and role-modeling from their teachers. African-American students often think: if they (as

African-American teachers, principals, and superintendents) can be successful, I can too (p.100)." Pang and Gibson (2001) stated that "African-American teachers are far more than physical role models, they possess diverse family histories, value orientations, and experiences to students in the classroom, attributes often not found in textbooks or viewpoints often omitted (p. 260)."

All students benefit from a diverse teaching population. Donnelly (1999) states that if all students are to receive a high quality education they need to be exposed to culturally diverse perspectives and experiences. Teachers from different ethnic, racial, and linguistic backgrounds are needed to help facilitate this learning. To emphasize this point, the former secretary of education Richard Riley (1988) stated that "if we are to be responsive to the special demands and great opportunities of our nation's pluralistic makeup, we should develop a teaching force that is diverse, as well. Many of the increasing numbers of students who will be filling our schools in the next decade will be children of color. Many will be sons and daughters of immigrants. Children need role models—they need to see themselves in the faces of their teachers. We need teachers who can relate to the lives of diverse students, and who can connect those students to larger worlds and greater possibilities. We need teachers from different backgrounds to share different experiences and points of view with colleagues. This sharing enriches and empowers the entire profession and students from all backgrounds (p. 19)." A diverse teacher population provides opportunities for all students to be mentored by someone they can identify with. Salathe (2002) reported that "role models for children of their own race or ethnicity are especially important since, . . . with an all-white teaching force minority students may come to think that they cannot aspire to the same profession or the

same academic standards as their mentors. . . furthermore, students from low-income backgrounds might not have out-of school opportunities to meet professionals of their own race or ethnicity. . . minority teachers also provide an important cultural perspective for both minorities and non-minorities . . . , support and counseling of [students] who have similar cultural backgrounds to affirm their belief in themselves and their traditions, [and] . . . are more likely to have insights into the special problems that minority students face in school as well as into shaping lesson plans or choosing curricula that take cultural differences into account (p.3)."

Diversity in classroom demographics also contributes to student success. Research shows that small class sizes, which are racially and intellectually mixed, strengthen student engagement in education for all students (Gay 2000; Slavin 1990). Gay researched how culturally responsive instruction effects student achievement while Slavin's research reviewed 29 studies which compared different types of student ability groupings and class size. Mentors also play a major role in student future career choices as well.

Bright, Duefield, & Stone (1988) hypothesized that the scarcity same-race role models may impede some racial minority's career development. They used surveys with 558 ethnically diverse fourth year medical students to form this hypothesis. Furthermore, role models may be especially important for minority student's career development because of a history of discrimination and limited career choices. These factors may have caused some minority students to lower their educational and career goals (Greene, 1990). Greene conducted an extensive literature review of articles related to the educational and career development of women of color.

Mentors may also have an impact on future compensation as well. Dreher and Cox (1996) determined that African-American and Hispanic Master of Business Administration degree (MBA) holders were less likely to establish mentor relationships in the workplace. This lack of a mentorship resulted in a loss of \$16,840 annually when compared to their white peers who established mentor relationships (p.297). Data for their study was obtained through 3,623 surveys of MBA graduates from nine business schools from 1969 to 1989.

Mentors also play a vital role for African-American students in higher education as well. Davis (2007) concluded that most of the African-American students participating in a mentoring program designed to encourage graduate school enrollment had positive experiences regardless of the mentor's race. Students with non-white mentors expressed higher levels of inspiration and engagement in these relationships. Positive role models and student teacher relationships also play an important part in the early academic years of children. Davis used interviews from undergraduate and graduate students participating in a summer mentor program designed to encourage African-American students to enroll in graduate school to obtain this information.

Student teacher relationships have a profound and lasting effect on student achievement. Student's relationships with their kindergarten teachers predict grades and standardized test scores through fourth grade, and children's pro-social behaviors to include citizenship and work habits, through eighth grade (Hamre & Pianta, 2001). This is true for both minority and non-minority students. A close teacher-child relationship may positively influence the developmental trajectory of school attainment among students at risk of poor school outcomes (Baker, Grant, & Morlock, 2008). They used

data from elementary school teachers completing the Basic Assessment Scale for Children on each of their students to come to this conclusion. "Furthermore, a supportive teacher-child relationship may buffer children from some risk factors associated with poor performance, perhaps because teachers are more likely to provide extra assistance to children with whom they have a positive relationship with (Resnick et al., 1997)." The authors used interview data from the National Longitudinal Study of Adolescent Health for grades 7-12 for their study. This extra assistance can be the difference between a student's success or failure in school. Baker (1999) discovered that perceptions of caring, supportive relationships with a teacher, and a positive classroom environment were related to school satisfaction as early as third grade (p.65). Baker examined poor urban third through fifth grade African-American students using observations, interviews and self report questionnaires for the study.

Barriers to mentorship programs and the lack of positive role models create challenges that may impede the academic achievement and overall success of African-American students. It is very evident that mentorship is an important contributor to a student's academic success. Kunjufu (1994) explained that African-American male teachers serve as positive realistic role models for African-American students and white students as well. Same race role models also have a positive effect on student achievement. Students are more apt to accept a role model in which they can identify with. King (1993) suggests that "the mere presence of a teacher of the student's own-race positively influences student effort, confidence, and enthusiasm (p.p. 115-149)." King came to this conclusion through an extensive examination of available research literature. It appears that early in a student's education, same race teachers have a positive effect on both

African-American and white students. Riley (1998) stated that “all girls and boys need role models that reflect the diversity of our country. Otherwise, children can be left with the subtle but enduring message that people of color are not capable of being teachers or holding other important positions in society. If we want to end these poisonous stereotypes, our teachers should look like America (p. 20).” Dee (2001) discovered convincing evidence that there are rather large educational benefits for both African-American and White students from assignments to an own-race teacher in 3rd grade (p.3). Dee matched test score data with racial pairings of students and teachers in Tennessee. “The strength of same-race mentoring suggests the importance of validation in the academic socialization process but does not minimize the importance of cross-race mentoring given the demographics of educators at all levels (Davis 2007, pp. 227).” Whiting (2006) reviewed relevant literature and concluded that “the importance of mentors and role models in the lives of students cannot be underestimated. They have always played a fundamental role in developing gifts and talents and motivating students. Organizations such as fraternities, the Boys and Girls Clubs, 100 Black Men, Urban League, and others recognize that one person can make a difference in a child’s life. These male role models and mentors can focus on leadership skills, notions of manhood or masculinity, developing positive relationships, ways to resolve conflicts and manage anger, ways to cope with social injustices, strategies for improving learning strategies and techniques (e.g., study skills, organizational skills, time management skills), career development, social skills, soft skills, and networking. They can also provide exposure to college settings and vocational internships for older Black and Hispanic males (p.49).” At the college level, “racism at traditionally white institutions may be a key contributor to

the lack of strong mentorship and sponsorship for racial minority graduate students (Davis 2007).” An example of this would be a professor consciously not choosing to mentor an African-American graduate student due to racial bias (Davis 2007). “Faculty mentoring of African-American students increased academic engagement, attainment, and interest in graduate study (Davis 2007).” There is also evidence that African-American teachers have a positive effect on African-American student achievement.

The relationship between African-American teachers and African-American students often times translates to increased academic achievement. Research by Dee (2001) showed that African-American test scores improved by 4 percentage points when they spent at least a year with an African-American teacher. Thernstrom and Thernstrom (2003) discovered that African-American students who had African-American teachers outperformed those who had white teachers in both reading and mathematics by 4 to 5 percentage points (pp.201-202). They used the 1998 NAEP reading data and the 2000 NAEP math data as well as previous relevant research to uncover this fact. African-American and white teachers emphasize different aspects of education. Nelson-Barber and Mitchell (1992) contend that “teachers of color share their cultural identity or experience with students. What comes out in their teaching is the notion that a priori conceptions of subject matter often do not work unless they are conveyed and organized within the context of local values and expectations about teaching and learning. These teachers have highly specialized skills in tailoring content, using local vernacular, and building relationships with students—a skill that can be the most critical element in a teacher’s success in diverse settings. The absence of teachers who bring these special perspectives and sensitivities to the classroom can only intensify the failure of many

school districts to educate their growing populations of minority students (p. 231).” Milner (2006) revealed that “African-American teachers are important to have not because we want them [only] as role models. We want them because they have a way of teaching [African-American] kids that leads to achievement. They know how to come up with examples in the kids’ lives that make the lessons come alive, and they [African-American students] retain the material (p.97).” The study interviewed six educational researchers about the impact of African-American teachers in the classroom. Results obtained by Hughes and Kwok (2007), suggested that African-American children and their parents are less likely to experience home–school relationships and student–teacher relationships that support children’s achievement. The sample population for their study was ethnically diverse first graders from Texas public schools during the 2001-2002 school year. The results from the study were obtained through the use of teacher and student questionnaires. Bacon, Banks, Young, and Jackson (2007) discovered that African-American teachers placed a higher value on being personally involved with students, providing guidance, and knowing the students family and community. The study also concluded that there were differences in communication styles between some African-American women teachers and white teachers in classroom management and discipline. This difference was culturally relevant to African-American students (pp. 160-172). The data for the study was obtained by topic relevant interviews of 16 African-American teachers and 11 white teachers in 3 urban schools where the student population was predominantly African-American. There are other differences between African-American and white teachers as well. A study reviewing the relevant literature on self-fulfilling prophecy and teacher expectations conducted by Brophy (1983)

concluded that African-American students were given less attention and disciplined more than their white peers (631-661). African-American students strongly benefit from positive student-teacher relationships, same race-role modeling, and mentoring.

Achievement Gap

There is an achievement gap between African-American students and white students. According to Olszewski-Kubilius (2006), “the most significant educational problem in the U.S. is the fact that the achievement of minority children lags behind that of nonminority children. This is true whether one is talking about suburban or urban school systems and low-income or high-income families. On almost every indicator of achievement including grades, standardized achievement tests, college attendance and completion, minority children do not achieve at the same levels as nonminority children (p.28).” The author obtain this information from the College Board Report titled “Reaching the Top” and from the National Research Center on the Gifted and Talented Report titled “Promoting Sustained Growth in the Representation of African Americans, Latinos, and Native Americans Among Top Students in the United States at All Levels of the Education System.” These reports were based on information obtained from the 1998 NAEP report. Research conducted by Martha S. McCall, M.S., Hauser, C., Cronin, J., Kingsbury, G.G., & Houser, R. (2006), determined that an achievement gap exists between white students and African-American students in each grade and subject studied. The study also found that an achievement gaps exist among white students, Hispanic students, and African-American students in schools with similar levels of poverty. The study investigated the growth patterns of students enrolled in low income schools and minority students compared to students enrolled in higher income schools and

European-American students. Reading data from 569,564 students and 542,057 were used in the sample. The students were from a variety of large and small districts throughout the nation. The study analyzed data from the National Center for Education Statistics (NCES) Common Core of Data for 2002-2003. To stress the seriousness of this matter, Fryer and Levitt (2004) explained that “African-American students are falling behind in virtually all categories of skills tested, except the most basic. Over time, African-American students lose ground in virtually every skill area, except the most basic skills that are mastered by virtually all students in the grade.... It is difficult to know precisely what conclusion to draw from these results. To the extent that the pattern of African-American skill acquisition as students age follows the path of the basic skills, i.e., African-American students master the material, but at a somewhat later age than white students, the patterns maybe construed as encouraging. The implication would be that African-American students, although lagging behind white students at any particular point in time, are on parallel trajectories. Much more troubling, it would seem, is the possibility that as the skills become more difficult, e.g., division, a nontrivial fraction of the African-American students may never master the skills (pp.18-19).” The study analyzed and compared data from the NCES 1998 Early Childhood Longitudinal Study which included over 20,000 students nationally.

The achievement gap starts early. A U.S. Department of Education national study used a representative sample of children who were monitored from kindergarten through grade five found that the achievement gap appeared at kindergarten entry and increased at each successive grade level (U.S. Department of Education, U.S. DOE, 2004). Some studies show that the achievement gap begins prior to elementary school enrollment.

Findings from research conducted by Wang (2008) reveals that there is an achievement gap between African-American children and white children 4 years old, ranging from one-tenth of a standard deviation unit (on fine motor skills), one-fifth of a standard deviation unit (on measures of expressive language), to one-half of a standard deviation unit (on measures of reflective vocabulary and overall mathematics knowledge and skills). This indicates that African-American children, prior to kindergarten, start out on average, on lower levels than white children on measures of mathematics and literacy and reading (p.30). Wang's research used data from the Early Childhood Longitudinal Study, Birth Cohort. This national study used 10,000 students from infancy to kindergarten entry from 2001 to 2007. A longitudinal study conducted by Ikpa (2003) showed that ITBS scores for students in grades eight revealed that African-American students performed significantly lower than their white counterparts. In 1991, the gap was twenty-seven; but it increased to thirty-one in 1992. The gap remained at 31 points in 1995 and 1996 (p.43). The study analyzed and compared the ITBS scores from 1991 to 1996 of 19,000 Norfolk public schools students in Norfolk VA. After thirty years of decline, the achievement gap remained constant or rose in the 1990s, and it continued to rise throughout the decade (Jencks and Phillips, 1998). They analyzed and compared test data from a variety sources to include the National Longitudinal Survey of Youth 1979 and from The Armed Forces Qualification Test for their book.

Johnston and Viadero (2000) contend that a child's race will predict 'their success in school, whether they go to college, and how much money they will earn as adults. The authors' state that by the year 2019, whites will be twice as likely as African-Americans to hold college degrees. They explain that these school success predictors are a

consequence of the academic achievement gaps, which affect grades, test scores and course selections. It is vital that educators address the achievement gap. This study analyzed and made predictions from the College Board report from 1997, The NAEP report from 1978 to 1996, and U.S. Census Bureau prediction data from 2000. In order to address the achievement gap, the causes must be found.

Arnold (1993) contended that there are numerous reasons and causes for the achievement gap. They include poverty; lack of access to supplemental educational programs and other educational tools, including technology; poor quality schools, including underprepared teachers; low teacher expectations due to bias and racism; low levels of parental education and involvement; cultural and language differences; negative peer influences; geographic mobility over the summer months; and lack of tacit knowledge about higher education. Arnold used a 10 year longitudinal study of high school valedictorians from Illinois in 1981 for the study. Baker's (2005) review of relevant literature and research revealed the same results as the previous studies. He stated that African-American adolescents disproportionately attend large, urban, middle and high schools that have a large concentration of low-socioeconomic students. Academic achievement and graduation rates in many of these schools are very low in comparison to national averages.

Many African-American students attend schools in low socioeconomic environments. Hoffman and Charmaine (2003) reported that seventy-three percent of African-American 4th-grade students were enrolled in schools with more than one half of the students eligible to receive a free or reduced-price lunch. Twenty-eight percent attended schools with 51 to 75 percent of the students eligible, and 32 percent attended schools with 76 to

99 percent of the students eligible. Thirteen percent of African-American students were enrolled in schools with 100 percent of the students eligible for free or reduced-price lunch (p.28). Their report was a synthesis of numerous government statistical reports from the National Center of Educational Statistics. A significant number of African-American students attend schools where many students are from low income families. Students in low socioeconomic environments lack the academic resources of their more affluent peers which adversely effects their development.

Cooper and Schlesor (2006) stated that a possible cause for the achievement gap in young children is due to their cognitive development level (pp. 301-302). They came to this conclusion after examining the cognitive development of 56 kindergarten and first grade students. This may help explain why there is an achievement gap between African-American and white students before they enter elementary school. Results from the 1997 National Assessment of Educational Progress report (NAEP) illustrated that African-American nine year olds scores in academic achievement in science, math, and reading are significantly lower than their white counterparts. The gap may be more pronounced in older African-American students. The average reading level of an African-American high school graduate is 8th grade (Books, 2007, p.11). Books obtained this fact from an extensive review of literature and reports to include the 2005 Education Trust report. African-American 17-year-olds often have the math and reading scores of white students who are 13 years old (Barton, 2003). This information was obtained from NCES statistics. Evidence of the achievement gap is clear but what are some possible solutions?

Solutions to Closing the Achievement Gap

Dr. Sue Books (2007) stated that scholars do not agree upon what causes the achievement gap and offer a litany of solutions (pp. 11-13). She further stated that in order to close the achievement gap, scholars must understand its root causes (Books, 2007, pp. 12-15). The results of a study conducted by Martin, Martin, Gibson, and Wilkins (2007) showed that comprehensive after-school intervention is effective in increasing academic achievement and decreasing negative behavior among adolescent African-American male students. The study used 33 middle school and high school African-American students who were suspended at least once during the school year. The students were evaluated after they participated in an after school intervention program.

After an extensive literature review of significant factors related to the achievement gap, Ford (2006) feels that gifted and talented education can help close the achievement gap. She feels that the regular classroom teacher must hold African-American students to high expectations in the classroom. This would result in increasing the rate of gifted and talented referrals of African-American students (p.17).

Developmental strategies have also been proposed to close the achievement gap. Teachers can help close the achievement gap by identifying African-American students with less advanced cognitive levels and instruct them on Piagetian concepts like conservation and classification (Cooper & Schleser, 2006, pp. 304-305). Robertson (2008) contends that “educators must examine their instructional practices. American classrooms are more diverse now than ever. Today's reality is that students are expected to live among and work with individuals who may not share their backgrounds. In order

to reach and teach all students effectively, educators must use curricula and other instructional enhancements that are culturally responsive (p.37).”

College preparation programs are also a possible solution to the achievement gap. According to Perna & Titus (2005), “college preparation programs (also known as early intervention programs and pre-collegiate programs) are an increasingly common approach to raising the college enrollment rates of African-Americans, Hispanics, and other groups of students who are underrepresented in higher education. [Such programs like TRIO-a federally funded collection of programs] are designed to promote educational attainment by developing the skills, knowledge, confidence, aspirations, and preparation that are needed to enroll in and graduate from college (pp.485-486).”

Robertson used data from the National Education Longitudinal Study of 1988 second follow-up: Student component data file users’ manual. She focused on college preparation programs which emphasized or encouraged parent involvement. Programs like these tend to increase student achievement. These are but a few possible solutions to close the achievement gap. There is a well documented achievement gap between African-American and white students. Educators must first acknowledge that there is an achievement gap and develop instructional approaches which help minimize and eventually close it.

Subject Areas

There is clearly an achievement gap between African-American students and white students in academic subject areas. Research has confirmed and in many cases tried to develop possible specific subject area solutions. In a report published by U.S. Department of Education’s Institute of Education Sciences (2003-2004), showed that in

2001, African-American students scored lower than all other racial groups on both the verbal and mathematics section of the Scholastic Aptitude Test (SAT). On average, African-American students scored 96 points lower than white students on the verbal section in 2001, and 105 points lower than white students on the mathematics section in the same year. African-American students underachieve in mathematics.

Magnuson and Duncan (2006) analyzed data from the 1998 Early Childhood Longitudinal study and found that the achievement gap appears as early as kindergarten and increases over time, and that the gap in mathematics achievement is larger than the gap in reading achievement. A comprehensive study conducted by the National Center for Education Statistics (2001) determined that during elementary school, African-American students consistently scored lower on mathematics tests than white students. The African-American student and white student math achievement gap during these years was similar in size for boys and for girls. The African-American student and white student math achievement gap was 28 percent smaller for boys in grade 2 than for boys in grade 1. The gaps between the scores of African-American students and white students were apparent, even for elementary school children with similar math scores one or two grades earlier (p.31). The study also determined that in junior high school, African-American students acquired math skills at a slower rate than white students. Between grades 7 and 9, African-American students acquired math skills at a 72 percent slower than in comparison to white students. In grades 10 and 12, African-American students and white students acquired math skills at about the same rate. During junior and senior high school, the average mathematics scores of African-American students lagged behind the average mathematics scores of white students. While the overall gap in math between

African-American students and white students was about two-fifths wider in grade 9 than in grade 7, it was the same size in grade 12 as in grade 10 (p.34). The information used for the study consisted of numerous National Center for Education Statistics reports and studies. The National Center for Educational Statistics (2003) reported that African-American students' performance in mathematics was higher at ages nine, thirteen, and seventeen in 1999 than their performance in 1973 through 1982. However, African-American students' mathematics performance has seen no statistically significant change since the 1980s. In 1999, nine year-old African-American students had an average NAEP mathematics scale score lower than the score for white students who were nine-year-olds. African-American students who were thirteen and seventeen year-olds had average mathematics scale scores lower than both white students and Hispanic students' scores for the same age groups. While gaps in the mathematics scores between white students and African-American students and between white students and Hispanic students who were thirteen and seventeen year-olds have narrowed considerably since 1973, the gaps remained in 1999, and no clear trend is apparent (p.50). In fact, a literature review conducted by Taylor (2005) showed that the fifth grade racial achievement gap in math increased from 130 points in 1997 to 170 points in 2004. The eleventh grade racial achievement gap in math increased from 180 points in 1997 to 220 points in 2004 (p.262). The National Center for Education Statistics (2003b) NAEP report showed that in 2000, the average mathematic scale scores of eighth grade African-American students was 244 compared to 284 for white students. The average scale scores in 2003 were 252 for African-American eighth grade students compared to 288 for white students. The average scale scores of fourth grade African-American students was 203 compared to 234

for whites students. In 2003, the average scale scores of fourth grade African-American students was 216 compared to 243 for whites students. The achievement gap in math is clearly increasing. Barth (2001) analyzed 1999 NAEP data and found it is troubling that by the end of twelfth grade, most African-American students possess the math skills equivalent to the skills of most eighth grade white students. The math achievement gap has been examined from a developmental approach as well.

Cooper & Schleser (2006) studied the math achievement gap from a developmental perspective. Using a sample of 56 kindergarten and first grade students, they discovered that African-American students scored significantly lower than white students on tests of mathematical achievement. The results also indicated that proportionally more African-American students remained in an earlier stage of development (preoperational) as compared to their same-age white peers. Using results from a nationally representative sample of kindergarten age children Magnuson and Duncan (2006) showed that on math achievement, African-American and Hispanic kindergarten students scored about two-thirds of a standard deviation below white kindergarten students. There is clearly a developmental aspect to the achievement gap in mathematics. What are the possible causes of the achievement gap in math?

Cause of Achievement Gaps in Math

Flores (2007) conducted a literature review on math achievement and discovered that a possible reason for the achievement gap in math is due to the fact that African-American students are less likely than their white peers to have experienced and qualified teachers. This fact is reflected on standardized math test scores (Flores, 2007, p.32). This is a concerning point and plays a role in future math course competence and

selection. Math courses build upon each other. Students must master lower level concepts before they can move on to more advanced concepts. Skills learned in lower level courses must be applied in higher level math courses. Students must fully understand concepts they intend to apply. Lack of competence in lower level math skills will prevent students from selecting higher level math courses due to the lack of prerequisite skills needed to be successful.

By the time students enter high school, there is a significant decrease in the number of African-American students participating in advanced math courses (Johnson, 1984). The report analyzed data from a variety of sources to include NCES and the 1979 Scientific Manpower Commission. In 1998, only thirty percent of African-American students took advanced mathematics courses compared to forty-five percent of white students (NCES, 1998). A report developed by Shettle, Roey, Mordica, Perkins, Nord, Teodorovic, Brown, Lyons, Averett, Kastberg (2007) discovered that white, Hispanic, and Asian/Pacific Islander graduates who took calculus had average mathematics NAEP scores at the proficient achievement level. However, the average score of African-American graduates whose highest course was calculus was at the basic level.

Students must acquire the prerequisite skills needed to successfully take advanced mathematic courses which leads to high SAT scores and college acceptance. Nobel, Davenport, Schiel, & Pommerich, M. (1999) reported that urban students who take five courses of mathematics earned higher ACT Mathematics scores than urban students taking fewer courses. Data also suggested that urban/non-urban gaps in performance on the ACT Science Reasoning test are significantly reduced when urban students take tougher college preparatory courses. The study used the 1996 ACT scores from 5,489

students from 106 high schools. The study also used a take home questionnaire to assess student behaviors. Hoffman and Llagas analyzed 1973 to 2000 NAEP data and discovered that between 1984 and 2000, the number of African-American students per 1,000 12th graders taking Advanced Placement (AP) examinations increased. However, fewer African-American students per 1,000 12th graders than white or Hispanic students took AP exams in 2000 (pp.60-63). African-American students are half as likely as white students to be placed in honors or Advanced Placement (AP) English or math classes and 2.4 times more likely than whites to be placed in remedial classes. This is the case even when African-American students show equal ability with their white peers. They are less likely to be placed in accelerated classes as well (Harvard's Civil Rights Project, 2004). Mathematics is a sequential subject. Students must master basic concepts before they can move on to advanced classes. African-American students who have unqualified teachers are at a distinct disadvantage. There is also an achievement gap in reading.

Achievement gaps in reading

African-American students score lower in reading when compared to their white peers according to the Equity 2000 of the College Board Project (Green, 2001, 215-216). In elementary school, African-American students' scores on reading tests were consistently lower than the corresponding scores for white students. African-American students grow less academically in reading achievement during the school year than students in other groups (McCall, et al. 2006). The reading gap between the African-American students and white students widened by one-third between grades 1 and 2, and by one-sixth between grades 3 and 5. Even for elementary school children with similar reading scores

one or two grades earlier, the gap between African-American students and white students in reading achievement were generally present. African-American students acquired reading skills at slower rates than white students. Between grades 1 and 2 and between grades 3 and 5 African-American students acquired reading skills at a rate one-fifth slower than the rate for white students (National Center for Education Statistics, 2001). On reading achievement, African-American children and Hispanic children scored under half a standard deviation lower than white children (Magnuson & Duncan, 2006). Statistics presented by Columbia University (2005) shows that by the end of fourth grade, African American, Latino, and poor students of all races are two years behind their wealthier, predominantly white peers in reading. The study also showed that by eighth grade, they have slipped three years behind, and by twelfth grade, four years behind. Jeynes (2008) discovered through a meta-analysis of 22 studies that phonetic basic skills should be emphasized with minority students (p.163). He suggests that phonics instruction may effectively reduce the gap (p.163). A report published by U.S. Department of Education's Institute of Education Sciences (2003-2004), showed that in 2001, African-American students scored lower than all other racial groups on both the verbal and mathematics section of the Scholastic Aptitude Test (SAT). On average, African-American students 105 points lower than white students on the mathematics section in the same year. Results from a Columbia University (2005) report showed that only one in fifty African-American seventeen-year-olds can read and gain information from specialized text (such as the science section of a newspaper) compared to about one in 12 white students. By the end of high school, African and Hispanic students' reading skills are roughly the same as those of white students in the eighth grade. There is clearly

a reading achievement gap between African-American students and white students.

There is also an achievement gap in science.

Achievement gaps in science

African-American students underachieve in science compared to their white peers (Parsons, Travis, and Simpson, 2005, p.185). The study involved 3 urban schools with a large enrollment of low-socioeconomic African-American students. Data was obtained through teacher interviews and math and science scores from the 1996 and 2000 NAEP Third International Mathematics and Science Study databases. According to the National Assessment of Educational Progress study (Mullins, I.V.S., Dossey, J.A., Campbell, J.R., Gentile, C.A., O'Sullivan, C., & Latham, A. 1994), the gap in science performance scores of African-American, Latino, and Anglo-American students closed somewhat from 1977 to 1986. From 1986 to 1992, however, the achievement gains of these students seem to have stalled. The differences in performance among ethnic groups are still quite large for all three age groups considered. In 1992 the gaps in proficiency scores among students from Anglo-European and African ethnic backgrounds were 48 points for 17-year-olds, 43 points for 13 year olds, and 39 points for 9-year-olds. This means that 17-year-old African-American students scored lower than Anglo-Americans 13-year-olds. Bruschi and Anderson (1994) disaggregated the 1990 science content data by race from the NAEP and discovered that the largest gap in science mean proficiency scores for nine year olds was between white students and African-American students. White students had a twenty-eight point difference in Nature of Sciences scores to a thirty-three point or more difference in each of the other three content science areas (p.8). At age thirteen they determined that the gap between white and African-American students wined across content areas from a forty point difference in mean score in Life Sciences to nearly forty-

eight point difference in Earth and Space Science favoring the white students (pp.8-9).

Bruschi and Anderson (1994) determined that the mean proficiency scores for science content areas between racial groups were maintained and the achievement did not decrease with time (p.6). A report by Shettle, et al., (2007) found that the average science scores of Asian/Pacific Islander and white students were higher than those of African-American and Hispanic students whose highest level science course was the same. The average white score on the NAEP science assessment for graduates completing advanced science was 178. This was not significantly different from the score for Asian/Pacific Islander graduates, but was above the scores for both African-American (140) and Hispanic graduates (154) (pp. 15-17). There are many explanations for the gap in science scores but high school course selection seems to be the most prevalent.

In 2005, the racial/ethnic differences in completion of a curriculum at or above the midlevel show that there were significant differences by race/ethnicity in the highest level of mathematics and science courses taken. Asian/Pacific Islander graduates completed calculus or other advanced mathematics courses at a higher rate than all other racial/ethnic groups at sixty-two percent. African-American graduates completed the advanced courses at twenty-nine percent. White graduates completed advanced courses at forty-six percent while Hispanics completed the courses at twenty-eight percent. Asian/Pacific Islander graduates were also more likely than other racial/ethnic groups to have completed advanced science or physics at sixty-two percent compared to forty-six percent for white graduates, thirty-four percent for African-American graduates, and two percent for Hispanic graduates (Shettle, et al., 2007). Rigorous course selection and

culturally relevant science curricula are strategies to help close the achievement gap in science. Teacher expectations and beliefs also play a role in African-American student achievement.

Perceptions, Expectations and Beliefs

Research has shown that expectations are influenced by the race and ethnicity of students. White students, according to a meta-analysis of studies of teachers' expectations by Baron, Tom and Cooper (1985), elicited higher expectations for achievement than black students. Teacher expectations impact student achievement. Ferguson (2003) contended that effects of teacher expectations could be significant if the effects accumulate from kindergarten to high school. He also concluded that teachers' expectations, perceptions, and behaviors sustain and even expand the gap in achievement between African-American and white students. Teacher expectations also effect student achievement.

Proctor (1984), identified a direct relationship between teacher's expectations and student performance outcomes through his summarization of school and classroom literature on expectation effects. Teacher expectations play a huge roll on student classroom success. A study conducted by Good and Brophy (1987), manipulated teacher expectations for student achievement to see if these expectations would be fulfilled. When teachers were told that randomly selected students had been identified as "intellectual late bloomers," teacher behavior changed enough to have a significant positive effect on student performance, both in the classroom and on achievement tests. After an extensive literature on expectation outcomes, Caruthers (1985) stated that "The nature and degree of teacher expectations effects in a particular classroom are likely to

vary among teachers as a result of teacher beliefs about teaching and learning as well as specific characteristics of teachers and students. Once teachers are aware of these issues, they can begin to examine their beliefs and expectations, daily, to ensure that their interactions with students will lead to progress in learning and achievement (pp.13-18)."

Baron, Tom, and Cooper's (1985) meta-analysis of studies of teachers' expectations found that teachers often have higher expectations for white students than for students of color and that they have higher expectations for middle class children than for those from less affluent backgrounds. Most of the teachers in most of these studies were White.

In analyzing data on teacher expectation research, Good (1981) discovered that African-American students, tended to receive lower grades than white students for identical academic performance. Teachers also attribute the achievement-oriented behaviors of white students to such internal factors as effort or motivation, while they attribute the achievement-oriented behaviors of African-American students to factors that students cannot control, such as parental encouragement or heredity (Scott-Jones & Clark, 1986).

This study analyzed relevant research on African-American females and describes the findings on their achievement levels, expectations and motivations, and educational attainment. Good and Nichols (2001) stated that "teachers' expectations not only may influence teacher behavior, but also students' expectancies and behaviors. Students' expectations are formed by social performance comparisons made by themselves and their teachers and by their own beliefs of personal ability as well as those of their teachers and parents (p.114)." Berry (2003, 2004) analyzed numerous studies by the National Council of Teachers of Mathematics and reported that African-American male middle school students experienced lowered expectations from their mathematics teachers. He

also reported that these lowered expectations affected their achievement in mathematics and their opportunities to gain access to high-level mathematics courses. Marcus, Gross, and Seefeldt (1991) discovered that African-American boys believed that teachers had lower expectations of them when compared to their white peers. (pp. 363-367). The study included 80 fifth grade white students and African-American students. Results were obtained through the use of Teacher Treatment Inventories. This belief could contribute to low academic achievement. Proper classroom behavior or citizenship is essential to the learning process.

If a student is constantly being disciplined, there is little time for learning. This is especially true when students miss instructional days due to suspensions and expulsions. Downey and Pribesh (2004) reported that African-American teachers' evaluation of African-American student's behavior was more favorable than the evaluations made by white teachers. The results of the study suggest that bias on the part of white teachers better explained the discrepancy in evaluations, as opposed to the actual misbehavior of African-American students in white teacher's classrooms. The study estimated matching effects among kindergartners in the Early Childhood Longitudinal Study Kindergarten Class of 1998–1999 and eighth graders from the National Education Longitudinal Study of 1988. Decker, Dona, and Christenson (2007) found that, among African-American students, perceptions of the teacher-student relationship were predictive of academic engagement in class. As teacher-reports of student-teacher relationship quality increased, there were also increases in positive social, behavioral, and engagement outcomes for students. There were increases in positive behavioral, engagement, and academic outcomes as well. When a student is academically engaged, there is little time for off task

behavior. The participants for the study consisted of 44 students and 25 teachers from two suburban and three urban elementary schools. All of the students were identified by their teachers as having behavior problems. A multi-rater, multi-method approach was used. Downey, Douglas, and Ainsworth-Darnell (1998) conducted research that showed that African-American students displayed more episodes of unsatisfactory classroom behavior when compared to white students (p.156.) The study used 17,000 African American, Asian American, and non-Hispanic white high school sophomores from the first follow-up of the 1990 National Education Longitudinal Study. Self reports and questionnaires were used to obtain results. In contrast, Downey and Pribesh (2004) discovered that when a teacher's race is taken into account, African-American student's classroom citizenship ratings are higher than white students (pp. 277-281). The authors attribute this to teacher bias as opposed to oppositional cultural reasons. Aaron and Powell (1982) concluded that African-American students receive more negative feedback from teachers than their white peers (pp. 50-59). The study used 43 second grade teachers from 14 elementary schools. 13 were black and 30 were white. Behaviors were recorded on the Feedback Schedule scale and then analyzed. This in itself could lead to behavioral problems in class. Downey and Pribesh (2004) discovered that the perception that African-American students behave poorly in class may be due to bias by white teachers (pp. 271-278). Negative behavioral expectations from teachers adversely effects African-American student achievement. A false or negative perception by teachers about African-American students negatively impacts their achievement.

Oates (2003) discovered how important perceptions and ultimately expectations are to African-American student's performance and achievement. Through the use of surveys,

he discovered that there was evidence of anti-black bias among white teachers while African-American teachers showed race neutrality (2003, pp. 520-523). The study utilized data from the 1988 National Educational Longitudinal Study of 24,599 eighth grade students and compared the effects of white teachers' perceptions on African-American standardized test performance to the corresponding effect among white students. The study also compared the impact of African-American teacher perceptions across races. Self-fulfilling prophecies of teachers are very powerful. Whether intentional or not, teacher's perceptions effect the performance of their students. Tyler and Boelter (2008) determined that teacher's expectations are consistent predictors of performance outcomes for elementary, middle, and secondary students. Perceived teacher expectation emerged as a significant predictor of students' academic efficacy and academic engagement (p.27). The study used 262 black middle-grade students reported their perceptions of their teachers' expectations for classroom performance, along with their academic engagement and academic efficacy. Recording scales were used to obtain data for the study. This is especially pertinent to African-American students due to the achievement gap. Bol and Berry (2005), proposed that given that African-American students tend to score lower on mathematics achievement measures, this promotes the inaccurate perception that African-American students are not as motivated or do not work as hard as their peers in other ethnic groups (p.40). The study surveyed the perceptions of secondary mathematics teachers on factors contributing to the achievement gap and ways to reduce this gap. National Council of the Teachers of Mathematics (NCTM) members were surveyed, and a total of 379 teachers responded. Berry (2003, 2004) stated through the use of a vignette that African-American male middle school

students experienced lowered expectations from their mathematics teachers. He contended that these lowered expectations affected their achievement in mathematics and their opportunities to gain access to high-level mathematics courses in the future. There is a direct relationship between teacher expectations and actual African-American student achievement. Teacher training may be the solution to changing negative perceptions about African-American students.

Walker-Dalhouse and Dalhouse (2006) discovered that diversity training can help change the beliefs of white pre-service teachers (p.69). After their training, the pre-service white teachers were “less inclined to refer students for special education based on ethnicity and culture. They were also less likely to accept the use of ethnic jokes and phrases in their classrooms as well (pp. 76-77).” The study used 92 white pre-service teachers from middle to upper socioeconomic backgrounds. They were asked to respond to questions on a five-point Likert-type scale to estimate their beliefs about awareness of culture, diverse families, cultural communications, uses of assessment, and their teaching in multicultural classrooms before and after a junior level diversity practicum and seminar.

Bol and Berry (2005) proposed that it may be the case that some teachers’ perceptions of the motivation and work ethic of African-American and other minority students are inaccurate. This may be especially true of teachers who do not have large numbers of African-American or other minority students in their schools. They discovered a positive correlation between the percentage of white students enrolled in the respondents’ school and scores on a Student Characteristic scale (pp.40-41). Tyler and Boelter (2008) stated that teachers with low student expectations believe a student may have difficulty on

academic tasks; they will be disinclined to offer more challenging work to him or her. In addition, the teacher with low student expectations may create a less congenial classroom learning environment (p.28). This is another example of a teacher's self-fulfilling prophecy. Love and Kruger (2005) discovered that successful white teachers and African-American teachers of African-American students created a relational and personal environment in class (p. 87). These teachers also believed in "culturally relevant beliefs regarding a communal learning environment, success of all students, teaching as giving back to the community, and the importance of students' ethnicity (Love and Kruger, 2005, pp. 94-97)." The authors used surveys at six urban schools serving African-American students. The items on the surveys measured teachers' culturally relevant beliefs and determined which items correlate with higher student achievement. Participants included 244 teachers, paraprofessionals, counselors, principals, instructional specialists, and media specialists all with teaching experience ranging from no prior experience to 37 years of experience. Including diversity teacher training or professional development can help teachers reflect upon their beliefs or perceptions and hopefully make positive changes.

Bol and Berry (2005), proposed that there are convincing reasons why understanding teacher's perceptions of the achievement gap and strategies for its reduction are important. The teachers in their study considered student characteristics such as work ethic, peer pressure, laziness, and lack of discipline as causes of the achievement gap. Teacher expectations and bias may play a role in the kinds of practices or interventions implemented to address this gap. Teacher diversity training and professional development opportunities can help teachers to effectively teach African-American

students. Teachers must take an introspective look at their classroom practices to include expectations and ensure that all students receive equitable treatment. Special program referrals also impacts African-American student achievement.

Special Program Referrals

Ethnicity plays a role in referral decisions for gifted and talented programs and in special education. There is a vast amount of research on the over-representation of African-American students to special education programs. According to the National Center for Educational Statistics, 4.2% of African-American kindergarten students receive special education services compared to the national percentage of 4.14%. 5.46% of African-American 1st graders receive special education services compared to the national percentage of 5.36%. 9.31% of African-American 3rd graders receive special education services compared to the national percentage of 9.36. 11.94% of 5th grade African-American 5th graders receive special education services compared to the national percentage of 11.89 (NCES, 2007 Issue Brief, P.3). Furthermore, the 2000 Annual report, to congress showed that in the 1998-1999 school year, African-American students were 2.9 times as likely as white students to be labeled mentally retarded. The overrepresentation of African-American students in the mental retardation and developmental delay categories is more than twice their national population estimates. African-American students were 1.9 times as likely to be labeled emotionally disturbed and 1.3 times as likely to be labeled as having a learning disability. Furthermore, African-American students were less likely than their white counterparts to be returned to general education classrooms once they entered special education. This fact is significant because the student is not exposed to the regular education curriculum.

Blanchett (2006) discovered in her analysis of relevant literature that special education has become a form of segregation for African-American students. Special education according to Blanchett is not providing individualized instruction designed to return the student back to the regular education classroom. Instead, it prevents the return to the regular education classroom (p.25). The use of culturally unresponsive curriculum in special education and inadequate teacher training leads to the over-representation of African-American students to special education programs (pp. 26-27). A study conducted by Herrera (1998), showed there is a direct relationship between the number of white teachers and the number of African-American male students placed in special education. She discovered that cities with the highest percentage of white teachers have the highest percent of black students identified as needing and or receiving special education services (p.12). Herrera analyzed, compared, disaggregated demographic and student public school information from 10 large city school districts. The achievement gap increases when students are not exposed to the regular education curriculum due to special education programs. Placement practices in special education programs may play a role in the development of low expectations for students. Fair (1980) determined that, "the placement of minority group students in special education programs further influences the expectations of teachers who may already have negative attitudes about the intellectual potential of minority group children" (p. 275). The study discussed reasons for and ways to eliminate the overrepresentation of minority groups in special education classes. It also presented the need for parent involvement in special education programs and the need for career/vocational training. According to the Twenty-Second Annual Report to Congress on the Implementation of the Individuals with Disabilities Education

Act Annual Report (2000), mislabeling often results in low expectations for achievement that are held for the student. The potential for social-emotional problems increases and post-school outcomes are seriously undermined. Mislabeled students may, in fact, experience similar negative results as students with disabilities, such as inequity in educational opportunity, differential graduation rates, differential earning power upon graduation, and differential enrollment in postsecondary educational institutions. The overrepresentation of African-American students in special education epitomizes the challenges African-American students and their teachers face when trying to close the achievement gap.

Herrera (1998) found that cities with the highest proportions of African-American teachers placed African-American males in special education at lower rates than cities with an intermediate or low proportion of black teachers. At least 1 out 6 of every African-American males in these school districts will end up in some type of special education program (p.15). Students in special education programs are not exposed to the general education curriculum. This often times leads to academic achievement gaps. According to the twenty-second annual report to Congress on the implementation of the Individuals with Disabilities Education Act (2000), overrepresentation of African-American students in special education is a problem that undermines efforts to provide equitable education for all children in this country. African-American youth, ages 6 through 21, account for 14.8 percent of the general population but account for 20.2 percent of the special education population. African-American students are three times more likely than white students to be placed in special education programs. They are also half as likely as their white peers to be in gifted programs in elementary and secondary

schools (Columbia University, 2005). Research shows that African-American students are overrepresented in special education programs. Special education is not necessarily a negative thing for students. Many students from all ethnicities benefit from the specialized educational services they receive. The problem occurs when students are placed in special education programs based on race and not need. African-American students who are placed in special education based on race; do not receive the same rigor or curriculum as students who are in regular education. This phenomenon increases the achievement gap between African-American students and white students. Ethnicity plays a role in the selection of students for gifted and talented programs. This fact is significant because these programs could possibly help close the achievement gap.

There is a significant amount of literature showing that there is a national underrepresentation of African-American students in gifted and talented programs (Ford and Webb, 1994, p.358). This problem exists even when African-American students are from higher socioeconomic status (SES) backgrounds (Elhoweris, Muta, Alsheikh, and Holloway, 2005). The study used 207 elementary school teachers from a large mid-western city. Teachers were given the same short case vignettes describing a gifted child. The race of the child was manipulated to track gifted referral decisions made by the teachers. African American children make up 16% of the children in public school systems but only comprise 8.4% of the children in gifted programs (Huff, Houskamp, Watkins, Stanton, & Tavegia, 2005). The study obtained this information from a literature review related to gifted African-Americans and their parent perceptions. From 1978 to 1997 Hispanic students identified as gifted increased from 5.2% to 8.6%. During that same period, African-American students identified as gifted declined from

10.3% to 7.3%, even as the overall African-American student population increased from 15.7% to 17.0% (U.S. Department of Education, 2005).

The underrepresentation of African-American students in gifted programs may be due to the focus on the achievement of students who under-perform. African American children who excel in school have been grossly underserved and neglected (Harmon, 2002). The study used six gifted African-American students (grades 4-5) who attended a predominately white school and then returned to their predominately African-American school. Three teachers were also used for the study. Data collection was conducted by interactive fieldwork, classroom observation, group discussions, student interviews, and teacher interviews. Ford, Harris, Tyson, and Troutman (2003) reviewed factors affecting the persistent underrepresentation of African-American students in gifted education. They discovered that due to the focus of closing the achievement gap and cultural biases about African-American student's academic and intellectual functioning, many students are neither placed into gifted programs nor provided the support needed to remain in them, 2002).

Elhoweris et al., 2005, discovered that a student's ethnicity did make a difference on a teacher's decision to refer a student to gifted and talented programs. It did not however have an effect on placement decisions (pp. 28-29). Hoge and Cudmore (1986) even questions the ability of a teacher to identify and refer students to gifted and talented programs due to lack of knowledge after conducting an extensive review of empirical research on teacher judgment measures for identifying gifted students (pp.181-196). Lack of teacher training programs may lead to the underrepresentation of African-American students in gifted and talented programs. In a meta-analysis conducted by

Tenenbaum and Ruck (2007), it was found that teachers were much less likely to refer African-American and Hispanic students for gifted programs than white students, with a difference of almost one full standard deviation. The study consisted of four quantitative meta-analyses which examined whether teachers' expectations, referrals, positive and neutral speech, and negative speech differed toward ethnic minority students as compared with European American students. Student-teacher racial congruence influences a teacher's academic expectations. Elhoweris et al., 2005 contend that a student's ethnicity does make a difference in the teachers' referral decisions. Elementary school teachers treated identical information contained in the vignettes differently and made different recommendations despite the fact that the basic student information was identical in all ways except for ethnicity. Pigott and Cowen (2000) discovered that African-American and white teachers judged African-American students to have less academic promise than white children. The study examined the effects of teacher race, pupil race, and teacher-child racial congruence on teacher ratings of the school adjustment of 445 kindergarten through fifth-grade children from 70 classrooms in 24 racially mixed urban schools. This may be a possible explanation to why African-American students are underrepresented in gifted and talented programs. After conducting a literature review on research related to gifted and talented populations, Ford and Whiting (2008) stated that slightly more than 42% of students in public schools are culturally diverse but 90% to 92% of teachers are white. Teachers, the overwhelming majority of whom are white, are simply not referring African-American students for gifted education programs (p.29). Hebert (2002) discovered that student-teacher relationships and expectations significantly impacted gifted African-American students' achievement and motivation. This

information was obtained from a case study of a gifted African-American child living in an impoverished rural environment. Ford and Harris (1996) also found that most of the gifted African-American students had successful outcomes in school, when they had positive relationships with their teachers and when teachers tried to understand them. The study included 148 African-American elementary school students (48 were considered gifted). Questionnaires and interviews were used to obtain data on attitudes toward school, achievement, and other educational variables.

Harmon (2002) discovered that many African-American students are often frustrated and angry about being isolated from other African American students while they participate in the gifted education classrooms. They also felt alienated from their gifted white classmates. Many African-American students reported being teased, taunted, and intimidated by some of the white students in their gifted education classrooms. After conducting a comprehensive review of literature on African-American students in gifted programs, Ford (1994) concluded that most of that research and literature focused heavily on the recruitment (i.e., the identification and assessment) of African-American students for placement in gifted programs. Almost no attention focused on their retention or on strategies for ensuring that culturally diverse students experience success once identified and placed. Peer mentoring is a promising strategy proposed by Whiting (2006), to help retain African-American students in gifted programs. This arrangement includes older diverse students mentoring younger diverse students (e.g., class valedictorians and salutatorians, members of National Honor Society) and providing similar types of experiences as those just described (p.49). This strategy was developed through an extensive literature review related to culturally diverse males' scholar identity. The

process for referring African-American students to gifted and talented programs must be more objective. Teachers must also receive the appropriate gifted and talented training which focuses on selection and retention of African-American students as well.

No Child Left Behind

One of the most important aspects of the No Child Left Behind (NCLB) act was to close the achievement gap and make sure all students, including those who are disadvantaged, achieve academic proficiency. According to the U.S. Department of Education (2002), a major objective of NCLB was to hold schools accountable for closing the achievement gap between various groups of students. All student populations must obtain proficient levels of achievement on state standardized tests. This may not necessarily be the case. “The widening achievement gap coincides with significant changes in education policy. The 1980s were characterized by increased standards, such as stricter course requirements for graduation. These changes reached a plateau during the mid-to-late 1990s and were followed by accountability reforms, adding new measures of outcomes and direct consequences for low performance (Harris & Harrington, 2006).” The study reviewed the policies that helped to reduce the achievement gap before 1990, the effects of the subsequent shift toward accountability, and what can be learned from past successes to guide the future development of accountability systems. According to Gay (2007) “NCLB is not taking into account the possibility that students from different ethnic and cultural groups who attend achieving schools do not perform as well as their mainstream white peers. They may be meeting standards but racial disparities in achievement still exist. This requirement is also challenging to urban diverse populated districts. These districts struggle while less

diverse suburban districts have an easier time meeting the standards proposed by NCLB. The overwhelming (if not exclusive) focus on schools in predominately urban poor communities of color sends signals that students who attend schools in middle-class and affluent environments have no achievement problems (p.289)". The study examined educational significance, teacher quality, the choice for all students to attend a high-achieving school and dealing with diversity as it relates to NCLB. It revealed some of the inherent contradictions in what NCLB purports to do, and what it actually does. Hursh (2007) reports that "adequate yearly progress indicators of NCLB provides little information on whether schools are making progress but, instead, serve to unfairly punish urban schools, the schools mostly likely to serve students of color and students living in poverty (p.298)." The study used a focused review of literature on NCLB from a political perspective.

NCLB has also had negative curricular affects as well. Foley, Sloan, Valencia & Valanzuela, (2001) discovered through a review of literature related to the effects of NCLB that the concern of losing federal funding has led many districts, to limit or restrict their curriculum in order to pass the required standardized tests. Research has shown that high-stakes testing in general leads to a narrowing of instructional practices, focusing on test preparation, and increased use of drill and practice. Dillon (2006) reported that schools that once offered a rich curriculum to all their students are reducing or limiting instruction in history, science, and the arts to focus on math and reading. He reported that a survey conducted by the Education for Meaning and Social Justice Center on Educational Policy found that since the passage of NCLB, 71% of the nation's school districts have narrowed their curricula in order to meet federal benchmarks in math and

reading. Test scores strongly correlate with a student's family income, a school's score is more likely to reflect its students' average family income rather than teaching or the curriculum. Consequently, the largest percentage of failing schools in New York State is found in poor urban school districts (Hursh, 2007, p. 299). Lee (2006) analyzed 2003-2005 NAEP scores and reported that the basic trends in both achievement gains are almost exactly what they were before the act became law—modest gains in math, flat achievement in reading. There are now modest gains on the NAEP in math, but the growth pattern is the same as that which existed before NCLB. Achievement on reading tests is basically unchanged. It shows that continuing the current trends will leave the nation very far from reaching the 100% proficiency goal (p.8). Foley et al. (2001) concluded that states that use standardized tests for grade promotion and graduation rates are increasing the achievement gap between poor, minority students and their more affluent peers. This practice contributes to high dropout rates for African-American and Hispanic students. Some research proposes that NCLB is effective and has a positive effect on the achievement gap.

Abeille and Hurley (2000) declare that state standardized testing systems with minority students have had mixed results and there is some evidence to show that forms of accountability, such as state tests, actually do improve achievement of some minority students. The authors analyzed the Massachusetts Comprehensive Assessment System for relevancy and effectiveness by conducting focus groups of superintendents, principals and teachers as well as a broad questionnaire survey and extensive telephone interviews and site visits. Koschoreck (2001), reported that due to the provisions of NCLB, positive classroom effects such as an emphasis on writing across the curriculum, use of graphic

organizers, a well-defined curriculum, teachers having more access to more accurate data, and teachers' beliefs that student skills were actually improving. The study analyzed the effects of district leadership on academic outcomes with low-income children and children of color in four successful school districts in Texas. Data was collected through interviews of central office personnel, administrators, teachers, parents and members of the community. Bush (2004) stated that in Maryland, the percentage of African-American third-graders who are reading proficiently increased 16 percentage points in one year. The percentage of Hispanic fifth-graders achieving proficiency in math increased nearly 10 percentage points and 25 schools exited school improvement status this year after meeting their performance objectives (p.120). The document titled How NCLB benefits African-Americans (2005) reported that reading and math scores for African-American 9-year-olds, and math scores for African-American 13-year-olds, are at all-time highs. The achievement gaps in reading and math between white and African-American 9-year-olds are at all-time lows. It also stated that academic progress in urban schools has outpaced national gains. An analysis conducted by The Council of the Great City Schools (2008) showed that between 2003 and 2007, the majority of Great City School districts (64 percent) narrowed the gap between their fourth-grade African-American students and fourth grade white students statewide in reading proficiency. 67 percent of the Great City School districts narrowed the achievement gap at the eighth-grade level between their African-American students and white students statewide in reading (p.10). The analysis used data from the National Assessment of Educational Progress (NAEP), 2007 mathematics and reading assessments. It also used the National Center for Education Statistics, Common Core of Data. The Public Elementary &

Secondary School Universe Surveys and the Local Education Agency Universe Surveys were used as well. Bush (2004) stated that the number of schools identified as needing improvement in Wisconsin decreased to just 54 this year. Twenty-eight schools left the list because they met annual performance objectives for two straight years. Georgia has narrowed the achievement gap between African-American and white students from 13 percentage points down to 8. In addition, Hispanic students narrowed the gap with their white classmates by four percentage points (p.120).

One of the goals of NCLB is to close the achievement gap between minority and white students. Schools must now look at each student population to include socio-economic when analyzing standardized test scores. No single population can mask the deficiencies of the others. NCLB has many positive features but has negative effects as well. The focus on standardized testing tends to narrow the scope of curriculum in order to focus on the subjects being tested. NCLB is a positive first step towards addressing the achievement gap.

Summary

The literature review clearly gave helpful insight when researching the relationship between the percentage of African-American teachers on a campus and the percentage of African-American students passing the Texas Assessment of Knowledge and Skills (TAKS) test. There were numerous trends and factors that were presented in the literature review. The effects perceptions and beliefs have on African-American achievement were significant in all major subject areas. White teachers who are not familiar with diversity issues may assume that African-American students have more discipline problems than white students when in fact; this may not necessarily be true.

Discipline issues reduce the time the student receives instruction. Referring students to special education and gifted and talented programs seems to be a function of teacher perception and lack of training. Teacher training seems to be the key to addressing the teacher perception problem. Mentoring and creating a culturally sensitive environment also seems to be important when examining student-teacher racial congruence. There is an academic achievement gap between African-American students and white students. Legislative solutions such as NCLB have mixed results in closing the achievement gap. The focus on state standardized testing and connecting federal funds to test scores has caused some districts to focus on test taking strategies. It has also caused some districts to narrow their curriculum. Examining the relationship between the percentage of African-American teachers on a campus and the percentage of African-American students passing the TAKS test should add to existing research by either confirming or denying that the relationship exists.

CHAPTER III

Methodology

This chapter describes the research methodology which the researcher will use to examine the relationship between the percentage of African-American teachers on secondary public school campuses and the percentage of African-American students passing the Texas Assessment of Knowledge and Skills test (TAKS) on those campuses. The study will use campus TAKS scores obtained from the Texas Education Agency's (TEA) database. This chapter includes the following sections: the general research perspective, the research context, the research participants, instruments used in data collection, procedures used, data analysis, and summary.

The General Perspective

This quantitative ex post facto study will investigate if the percentage of African-American teachers on Texas secondary school campuses is related to the percentage of African-American students passing the TAKS test. It is important to point out that the study will not attempt to show cause and effect. The study will only show if there is a significant relationship between the relationship between the percentage of African-American teachers and the percentage of African-American students passing the Texas Assessment of Knowledge and Skills (TAKS) test. The bivariate Spearman correlation statistic will be used to determine significance at the .01 and .05 levels.

Research Questions and Hypothesis

This quantitative ex post facto study will be designed to address the following research questions and test the following hypotheses:

1. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing all TAKS tests for their grade level?

H1: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing all TAKS tests for their grade level.

H0: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing all TAKS tests for their grade level.

2. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their reading / English language arts TAKS test?

H1: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their reading / English language arts TAKS test.

H0: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their reading / English language arts TAKS test.

3. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS math test?

H₁: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS math test.

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS math test.

4. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS science test?

H₁: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS science test.

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS science test.

5. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS writing test?

H₁: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS writing test.

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS writing test.

6. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS social studies test?

H₁: There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS social studies test.

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing their TAKS social studies test.

7. Is there a significant relationship between the percentage of African-American teachers on a given campus and the average African-American student's scores on the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT) test?

H₁: There is a significant relationship between the percentage of African-American teachers on a given campus and average African-American student's scores on the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT) test

H₀: There is no significant relationship between the percentage of African-American teachers on a given campus and average African-American student's scores on the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT) test.

The researcher used inferential statistics to answer the research hypothesis.

The Research Context

The research activities of this study will analyze Texas Assessment of Knowledge and Skills (TAKS) data for a three year period. The research will also analyze Scholastic Aptitude Test (SAT) scores and the American College Test (ACT) scores for the same period of time. The school years covered will be 2005-2006, 2006-2007, and 2007-2008. The schools that will be chosen for the study will be selected from Texas Region 10. Region 10 is located in North Texas and consists of Grayson, Collin, Dallas, Ellis, Kaufman, Rockwall, Fannin, Hunt, and Van Zandt counties (Appendix A). There are 80 public school districts in the region with a 2008-2009 student enrollment of 707,902.

Region 10 has a diverse student population. According to the 2008-2009 Region Academic Excellence Indicator System (AEIS) region performance report, African-American students comprised 20.4% of the student population (144,376). Hispanic students comprised 38.6% of the student population (273,402). White students comprised 35.3% of the student population (249,880). Native-American students comprised 0.5% of the student population (3,418). Asian/Pacific Islander students comprised 5.2 % of the student population (36,826). 17.5% of the students received bilingual/English as a second language educational service (124,122). 20.1% received career and technical educational services (142,315). 8.3% received gifted and talented educational services (59,090). 9.9% received special education services (69,758). 51% of the student population is classified as economically disadvantaged (361,294) and 18.6% of the student population is classified as limited English proficient (131,634).

The Research Participants

A total of 50 middle schools and 50 high schools will be randomly chosen from the following region 10 independent school districts (ISDs): Carrollton-Farmers Branch ISD, Cedar Hill ISD, Commerce ISD, Coppell ISD, Desoto ISD, Duncanville ISD, Ennis ISD, Forney ISD, Frisco ISD, Garland ISD, Grand Prairie ISD, Greenville ISD, Irving ISD, Kaufman ISD, Lancaster ISD, McKinney ISD, Mesquite ISD, Plano ISD, Red Oak ISD, Richardson ISD, Rockwall ISD, Sherman ISD, Terrell ISD and, Waxahachie ISD.

These districts are located in the suburbs near a large urban school district. Each district has unique and distinct testing and demographic data (Appendix B). The schools will be randomly chosen from non-urban districts due to the fact that African-American teachers are overrepresented in urban districts (Texas 2007-2008 AEIS). Schools with statistically insignificant numbers of African-American students will be excluded as well. Scores from student categories (African-American, Hispanic, white, Native-American, Special Education, Limited English Proficient, Economically Disadvantaged) with small numbers of members at a school are masked to protect the identity of the students and are not available on AEIS reports.

If there are fewer than 30 students tested in a student category, scores are not counted towards the school's state accountability rating (Appendix C). If there are at least 30 to 49 students within the student category and the student category comprises at least 10% of all students, it is counted towards the school's state accountability rating. If there are at least 50 students within a student category, it counts toward the school's state accountability rating. The districts listed above had sufficient numbers of qualified

schools for this type of study. Each school is also given an individual accountability rating based on overall school academic achievement.

The Texas Education agency has four accountability ratings for schools. They are Exemplary, Recognized, Academically Acceptable, and Academically Unacceptable. The requirements for the ratings have changed during the period this study has taken place. In order to earn an exemplary rating, schools must have a 90% pass rate for all student populations and TAKS subject areas. This requirement was in effect for the duration of the study from 2005 to 2008. In 2005-2006, schools must have a 70% pass rate by all student populations and in all TAKS tested subjects in order to earn a recognized rating. In 2006 to 2008, schools must have a 75% pass rate by all student populations and in all TAKS subject areas. The academically acceptable has specific requirements based on the TAKS tested subject.

In 2005 to 2006, schools earning the academically acceptable rating must have a 60% pass rate in reading/English language arts, Writing, and social studies. They must also have a 40% pass rate in mathematics and a 35% pass rate in science. In 2006 to 2007, the pass rate increased by 5%. The required pass rate for reading/ English language arts, writing, and social studies was 65%. The pass rate for mathematics was 45% and science was 40%. In 2007 to 2008, the pass rate was again increased by 5%. The pass rate for reading/English language arts was 70%, writing was 65%, social studies was 65%, mathematics was 50% and science was 45%. This includes all student populations achieving these standards. Schools not meeting these standards are considered academically unacceptable and are subject to sanctions leading up to school closure. The district's rating is based on their individual school performances on the TAKS test.

Instruments Used in Data Collection

Demographic and achievement data for each school will be obtained from the Academic Excellence Indicator System (AEIS) through Texas Education Agency (TEA) database. This report is developed from data reported from each school in the state of Texas. The Academic Excellence Indicator System pulls together a wide range of information on the performance of students in each school and district in Texas every year. This information is put into the annual AEIS reports, which are available each year in the fall. The report can be requested for the state, region, district, or campus. A sample snapshot of the state's 2007-2008 AEIS report is located in Appendix D. The performance indicators are: results of Texas Assessment of Knowledge and Skills (TAKS); by grade, by subject, and by all grades tested; participation in the statewide assessment programs (TAKS/TAKS (Accommodated)/TAKS-M/TAKS-Alt); Exit-level TAKS Cumulative Passing Rates; progress of prior year TAKS failures; results of the Student Success Initiative; attendance rates; Annual Dropout Rates (grades 7-8, grades 7-12, and grades 9-12) and completion rates (4-year longitudinal).

The AEIS also reports college readiness indicators; completion of advanced / dual enrollment courses; completion of the recommended high school program or distinguished achievement program; participation and performance on Advanced Placement (AP) and International Baccalaureate (IB) Examinations; College-Ready Graduates; Texas Success Initiative (TSI) – higher education readiness component; and participation and performance on the college admissions tests (SAT and ACT). Performance on each of these indicators is shown disaggregated by ethnicity, sex, special education, low income status, limited English proficient status (since 2002-03), and

beginning in 2003-04, at risk status (district only). The reports also provide extensive information on school and district staff, finances, programs and student demographics (Academic Excellence Indicator System 2009). The most significant information obtained from the AEIS reports will be the teacher demographic percentages and the Texas Assessment of Knowledge and Skills (TAKS) achievement data.

The TAKS test is the actual instrument used to measure academic achievement. In 1999 the 76th Session of the Texas Legislature enacted Senate Bill 103, mandating implementation of a new statewide testing program. The new testing requirements, consequently named the Texas Assessment of Knowledge and Skills (TAKS), were implemented in spring 2003 (TAKS Information Booklet 2007).

The TAKS test is primarily a multiple choice test which measures the statewide curriculum in reading, science, writing (essay) and math. The Texas Education Agency (TEA) implements content validation panels composed of university level experts in each TAKS subject area to analyze all questions and field test data for reliability, validity, and possible bias. This process takes place annually. By law, all eligible Texas public school students are assessed in grades 3–11 in specific subject areas (Figure 1). The TAKS data for this study will include the first administration of the test only. Grades 3, 5, and 8 are given three chances to pass the TAKS test because they must be passed in order to advance to the next grade level (Student Success Initiative). Grade 11 (exit level) are given unlimited chances to pass the TAKS test. The TAKS test is also administered in Spanish for grade 3 thru 6 only. Eligibility is determined by the student's English language proficiency. The Spanish version TAKS scores will not be used for the study. Each subject area tested has specific objectives based on grade.

In reading grades 3-8, students must demonstrate a basic understanding of culturally diverse written texts. They must be able to apply knowledge of literary elements to understand culturally diverse written texts. They must use a variety of strategies to analyze culturally diverse written texts and they must be able to apply critical-thinking skills to analyze texts. In reading grade 9, students must demonstrate a basic understanding of culturally diverse written texts. They must demonstrate an understanding of the effects of literary elements and techniques in culturally diverse written texts. They must also demonstrate the ability to analyze and critically evaluate culturally diverse written texts and visual representations.

In writing grades 4-7 students must, within a given context, produce an effective composition for a specific purpose. They will produce a piece of writing that demonstrates a command of the conventions of spelling, capitalization, punctuation, grammar, usage, and sentence structure. They must also recognize appropriate organization of ideas in written text. The students must recognize correct and effective sentence construction in written text. They must also recognize standard usage and appropriate word choice in written text. The students must proofread for correct punctuation, capitalization, and spelling in written text.

In language arts grades 10 and 11, students must demonstrate a basic understanding of culturally diverse written texts. They must also demonstrate an understanding of the effects of literary elements and techniques in culturally diverse written texts. The students must demonstrate the ability to analyze and critically evaluate culturally diverse written texts and visual representations. They must within a given context, produce an effective composition for a specific purpose. The students must also produce a piece of

writing that demonstrates a command of the conventions of spelling, capitalization, punctuation, grammar, usage, and sentence structure. They must demonstrate the ability to revise and proofread to improve the clarity and effectiveness of a piece of writing.

Figure 1. TAKS grade subject chart

Grade	Subjects Tested				
3	Math	Reading			
4	Math	Reading	Writing		
5	Math	Reading		Science	
6	Math	Reading			
7	Math	Reading	Writing		
8	Math	Reading		Science	Social Studies
9	Math	Reading			
10	Math	Language Arts		Science	Social Studies
11	Math	Language Arts		Science	Social Studies

In mathematics grades 3-8, students must demonstrate an understanding of numbers, operations, and quantitative reasoning. They must also demonstrate an understanding of patterns, relationships, and algebraic reasoning. The students must demonstrate an understanding of geometry and spatial reasoning. They must also demonstrate an understanding of the concepts and uses of measurement. The students must demonstrate an understanding of probability and statistics. They must also demonstrate an understanding of the mathematical processes and tools used in problem solving.

In mathematics grades 9-11, students must describe functional relationships in a number of ways and demonstrate an understanding of the properties and attributes of functions. They must also demonstrate an understanding of linear functions and

formulate and use linear equations and inequalities. The students must demonstrate an understanding of quadratic functions and other non-linear functions. They must also demonstrate an understanding of geometric relationships and spatial reasoning. The students must demonstrate an understanding of two- and three-dimensional representations of geometric relationships and shapes. They must also demonstrate an understanding of the concepts and uses of measurement and similarity. The students must demonstrate an understanding of percents, proportional relationships, probability, and statistics in application problems. They must also demonstrate an understanding of the mathematical processes and tools used in problem solving.

In science grade 5, students must demonstrate an understanding of the nature of science. They must also demonstrate an understanding of the life sciences. The students must demonstrate an understanding of the physical sciences and the earth sciences.

In science grades 10 and 11, students must demonstrate an understanding of the nature of science. They must also demonstrate an understanding of the organization of living systems. The students must demonstrate an understanding of the interdependence of organisms and their environment. They must also demonstrate an understanding of the structures and properties of matter. The students must demonstrate an understanding of motion, forces, and energy.

In social studies grades 8, 10 and 11, students must demonstrate an understanding of issues and events in U.S. history. They must also demonstrate an understanding of geographic influences on historical issues and events. The students must demonstrate an understanding of economic and social influences on historical issues and events. They must also demonstrate an understanding of political influences on historical issues and

events. The students must use critical-thinking skills to analyze social studies information. Students must achieve specific performance standards in order to pass all subjects of the TAKS test.

The TAKS test performance standards are based on scaled scores. The minimum passing scale score for the TAKS test is 2100 with 2400 and above considered “commendable” or exceeded the standard. Using the 2008 TAKS secondary reading scores as an example, 6th grade students must answer 64% of the questions correctly (27/42) in order to achieve a passing scale score of 2100 on the reading TAKS. Seventh and eighth grade students must answer 68% of the questions correctly (33/48) in order to achieve a passing scale score of 2100. Writing uses a scale score and also uses a written composition rating.

Students in grades in four and seven must take the TAKS writing test. In 2008, fourth grade students must answer 50% of the multiple choice questions correctly (16/32) and receive at least a written composition rating of “2” on the essay portion of the test. Seventh grade students must answer at least 55% of the multiple choice questions correctly (24/44) and receive at least a written composition rating of “2” on the essay portion of the test. The composition rating is scored on a four-point scale, with 1 being the lowest score and 4 being the highest. Essays are scored using a rubric based on focus and coherence, organization, development of ideas, voice, and conventions. The TAKS Mathematics test also has performance standards.

In 2008, students in grade 6 must answer at least 52% of the multiple choice questions (29/46) correctly in order to get a passing scale score of 2100. Seventh grade students must answer at least 56% of the multiple choice questions correctly (27/48) in order to

receive a passing scale score of 2100. Eighth grade students must answer correctly 60% of the multiple choice corrections correctly (30/50). Appendix E contains performance standards for grades 3-11 for all subjects tested from 2006 to 2008. The performance standards are based on total number of questions answered correctly. Passing the TAKS test does not require specific scores on individual objectives. The number of questions per object differs by subject and grade level. Appendix F shows the number of questions per TAKS objective from 2006 to 2008.

The reliability of for each TAKS test was determined by Texas Education Agency utilizing the Kudar-Richardson formula 20.

$$\alpha = \frac{K}{K - 1} \left[1 - \frac{\sum_{i=1}^K p_i q_i}{\sigma_X^2} \right]$$

The Kudar-Richardson formula 20 is a measure of internal consistency (reliability) for measures with dichotomous answer choices. Values range from 0.00 to 1.00. The TEA calculated the TAKS internal consistency reliabilities from .80 to .90 on all subject areas. Specific reliability estimates by content area and student demographic groups can be retrieved from:

http://www.tea.state.tx.us/index3.aspx?id=4326&menu_id3=793.

Procedures Used

The first step in the procedural process will be to request a 2008 Region 10 Accountability Summary from the Texas Education Agency's database <http://ritter.tea.state.tx.us/perfreport/account/2008/index.html>. The summary lists all schools in the region subject to state accountability ratings. The list is organized by district in alphabetical order. Associated elementary and secondary schools are organized

in alphabetical order under the district's heading. The next step will be to remove all charter and elementary schools from the summary. The one large urban district will also be removed due to the disproportionate percentage of African-American students and teachers district wide. Two summaries will be developed. One summary will contain only middle or intermediate schools including at least grade 6 and no higher than grade 8. The second summary will contain only high schools with grades 9 up to 12. This process should produce 160 middle schools and 111 high schools. Each school will be assigned a nominal number from 1 to 160 for the middle school summary and from 1 to 111 for the high school summary based on alphabetical order. These number parameters will be imputed into the Research Randomizer website to generate 50 random numbers for each summary.

The Research Randomizer is a free service for researchers and students to use for random assignments and random sampling. The site was released in 1997 and is part of the Social Psychology Network. The network is devoted to psychological testing and education. The website is located at www.randomizer.org/form.htm. The Research Randomizer provides prompts with fill in the blank responses. The researcher will select 1 set of numbers to generate for the middle school summary and 1 set of numbers for the high school data. The numbers per set of data will be selected at 160 for the middle school summary and 111 for the high school summary. The range of possible number selections will be set from 1 to 160 for the middle school summary and from 1 to 111 for the high school summary. The unique number set option will be selected to eliminate duplicate numbers.

The selections will be made from the first 50 eligible random numbers generated by the Research Randomizer. The first 50 eligible schools will be selected from the middle school summary list. The same process will also be used to select the 50 eligible high schools using the random number list that will be generated for the high school summary list. Eligible schools that will be selected must have enough African-American students take the TAKS test to register results on the Academic Excellence Indicator System (AEIS) report for the particular secondary school. Scores are masked on the AEIS report to protect the confidentiality of students taking the test. When student testing populations are small on a given campus, it is possible to identify those students. Masking the scores prevents these students from being identified. When a random number identified an ineligible school, it will be discarded and the next eligible identified number will be selected until 50 eligible middle schools and 50 eligible high schools are selected.

The AEIS reports for the randomly chosen 50 middle schools and 50 high schools will be retrieved from the Texas Education Agency's database for the 2005-2006 school year, 2006-2007 school year, and the 2007-2008 school year. The AEIS database is located at <http://ritter.tea.state.tx.us/perfreport/aeis/>. The raw testing and demographic data for each school will be disaggregated from the individual AEIS reports.

The middle school disaggregated data will contain the percentage of African-American teachers on the selected campus. It also will also contain the percentage of African-American 6th grade students who passed the TAKS reading test, TAKS math test, and the percentage of African-American students who passed both tests. It will contain the percentage of 7th grade African-American students who passed the TAKS reading test, TAKS math test, TAKS science test, TAKS social studies test, TAKS writing test,

and the percentage African-American students who passed all tests. It will also contain the percentage of 8th grade African-American students passing the TAKS reading test, TAKS math test, TAKS science test, TAKS social studies test, and the percentage of African-American students passing all parts of the TAKS test.

The high school disaggregated data will contain the percentage of African-American teachers on a given campus. The percentage of African-American 9th grade students who passed the TAKS reading test, TAKS math test, and the percentage of African-American 9th grade students who passed both tests. It will also contain the percentage of African-American 10th grade students who passed the TAKS language arts test, TAKS math test, TAKS science test, TAKS social studies test, and the percentage of African-American 10th grade students who passed all four tests. It will contain the percentage of African-American 11th grade students who passed the TAKS language arts test, TAKS math test, TAKS science test, TAKS social studies test, and the percentage of African-American 11th grade students who passed all four tests. It will also contain SAT and ACT scores from the 50 selected high school campuses.

Information that will be collected from the disaggregated AEIS data will be entered into SPSS. Bivariate Spearman correlations will be conducted to analyze the association between the percentage of African-American teachers on a given campus and the percentage of African-American students passing various TAKS testing achievement areas on that campus. This will be done using testing data from a three year period (2006-2008). Bivariate Spearman correlations will be conducted between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the following TAKS tests: all areas, the reading test,

the math test, the science test, the English language arts test, the social studies test, and the writing test. Bivariate Spearman correlations will be conducted separately for middle schools and high schools for the years 2005 to 2008. They will also be conducted for SAT and ACT scores during the same time period.

Data Analysis

Data Organization

Data will be organized into distinct groups. The middle school AEIS data will be imputed in SPSS 15 with separate tabs indicating the three year period selected for the study (2005-2008). The high school AEIS data will be imputed separately in SPSS 15 with the associated tabs labeling the three year period for the study. The high school data also included SAT and ACT scores for the three year period as well.

Tables depicting the percentage of African-American teachers on campus and percentage of African-American students passing all areas of the TAKS test by middle school and high school will be developed to analyze the data. Tables will also be used to depict the descriptive statistics for each research question.

Statistical Procedures

Descriptive statistics were used evaluate the research questions and to test the hypothesis of the study. Bivariate Spearman correlation coefficients were calculated for each of the seven research questions. They were calculated separately for middle schools and high schools over a three year period (2005-2008). Bivariate Spearman correlation coefficients were then evaluated to determine if the results were significant for each of the relationships presented in the seven research questions. The Bivariate Spearman correlation statistic was selected because it is less sensitive to bias due to the effect of

outliers. The randomly selected campus data for the study contained numerous outlier TAKS assessment and teacher demographic data.

Summary of the Methodology

This chapter explains the methods that will be used in this quantitative study. The methodology that will be used for this study will address the research questions stated in chapter one. This comparison of the percentage of African-American teachers on a given campus and the percentage African-American students passing the TAKS test is not intended to compare one teacher to another or one class to another. Individual teacher's differences would confound the data. The results of the study may be valid for schools with similar demographics as Region 10 in Texas. This research proposal is not comparing White teachers to African-American teachers. Some African-American students in the random sample may not have an African-American teacher. This research proposal will take a global look at how the mere presence of African-American teachers on a given campus is related to African-American student achievement. African-American students on a given campus may not have an African-American teacher but may interact with African-American teachers in other ways. Campus mentorship or buddy programs reach across grade levels and teachers. African-American teachers participate in before and after school tutoring. African-American teachers serve duties on campus such as bus duty, cafeteria, and other duties. Even if an African-American student does not have an African-American teacher, there are multiple opportunities for them to interact with African-American teachers on campus. The presence of African-American teachers on campuses may provide same race positive role models for African-

American students. Chapter four presents the results that were obtained from the research conducted in this study.

CHAPTER IV

Results

Fifty middle schools and 50 high schools participated in the study. A total of 41,697 middle school students and 98,926 high school students were enrolled in these two schools. The descriptive statistics for the demographics of the middle and high school students are listed in Table 1 and Table 2, respectively. The middle school students' ethnicity was reported as follows: 36.8% Hispanic, 29.8% White, 28.3% African American, 4.6% Asian/Pacific Islander and 0.5% Native American. Approximately half (53.8%) of the students in the reporting middle schools were considered economically disadvantaged, and 41.7% were considered At Risk. A small minority (10.9%) of the students were limited English proficiency students.

The ethnicity breakdown for the reporting high schools was slightly different than that of the middle schools: 43.8% White, 26.5% Hispanic, 22.2% African American, 7.1% Asian/Pacific Islander and 0.6% Native American. Approximately one-third (32.2%) of the high school students were considered economically disadvantaged. Relatively few (6.6%) of the high school students were limited English proficiency students, and less than half (41.3%) were considered At Risk.

Table 1

Descriptive Statistics for the Middle School Student Demographics

Variable	%
Ethnicity	
African American	28.3
Asian-Pacific Islander	4.6
Hispanic	36.8
Native American	0.5
White	29.8

Economically Disadvantaged

Yes	53.8
No	46.2
Limited English Proficient	
Yes	10.9
No	89.1
At Risk	
Yes	41.7
No	58.3

Table 2

Descriptive Statistics for the High School Student Demographics

Variable	%
Ethnicity	
African American	22.2
Asian-Pacific Islander	7.1
Hispanic	26.5
Native American	0.6
White	43.8
Economically Disadvantaged	
Yes	32.2
No	67.8
Limited English Proficient	
Yes	6.6
No	93.4
At Risk	
Yes	41.3
No	58.7

Research Question 1. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing all TAKS tests for their grade level?

H_0 : There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing all TAKS tests for their grade level.

H_A : There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing all TAKS tests for their grade level.

Several bivariate Spearman correlations were calculated to determine if there was a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school and high school students passing all TAKS tests. The analyses were conducted separately for the following 3 school years: 2005–2006, 2006–2007 and 2007-2008. The bivariate Spearman correlation is the non-parametric equivalent of the bivariate Pearson correlation. The Spearman correlation was utilized in this study because the distributions for the percentage of African-American teachers were markedly skewed.

The descriptive statistics for each variable are listed in Table 3. The correlation matrices for the middle and high schools are listed in Tables 4 and 5, respectively. The 3 correlation coefficients pertinent to the research questions are in bold in each matrix. The tests revealed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American *middle* school students' passing all TAKS tests in the later 2 years (2006-2007 & 2007-2008) of the study, $r = -.32$, $p < .05$. This indicates that the percentage of students passing all the tests decreased significantly as the percentage of African-American teachers increased. This pattern was

not significant in the first year (2005-2006) of the study among the middle school students, $r = -.23, p > .05$.

The correlations for the high school students demonstrated a similar pattern. The tests revealed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American *high* school students' passing all TAKS tests for all three years of the study. The effects were larger among the high school students compared to the effects found with the middle school students. The strongest relationship was during the second year of the study, $r = -.62, p < .01$.

Table 3

Descriptive Statistics for Research Question 1

Variable	M	SD	N
% African American Middle School Teachers 2005-2006	16.6	17.3	50
Middle School Total Score 2005-2006	44.9	10.9	50
% African American Middle School Teachers 2006-2007	18.1	18.1	50
Middle School Total Score 2006-2007	52.5	10.2	50
% African American Middle School Teachers 2007-2008	19.5	18.8	50
Middle School Total Score 2007-2008	60.0	12.6	50
% African American High School Teachers 2005-2006	8.9	8.8	50
High School Total Score 2005-2006	45.0	11.8	50
% African American High School Teachers 2006-2007	9.4	9.9	50
High School Total Score 2006-2007	49.3	12.5	50
% African American High School Teachers 2007-2008	10.3	11.3	50
High School Total Score 2007-2008	52.1	11.4	50

Table 4

Bivariate Spearman Correlations for Middle School Total Scores

Schools	r
Middle Schools 2005-2006	-.23
Middle Schools 2006-2007	-.32*
Middle Schools 2007-2008	-.32*

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

Table 5

Bivariate Spearman Correlations for High School Total Scores

Schools	r
High Schools 2005-2006	-.47**
High Schools 2006-2007	-.62**
High Schools 2007-2008	-.45**

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

Research Question 2. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the reading / English language arts TAKS test for their grade level?

H_0 : There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the reading / English language arts TAKS test for their grade level.

H_A : There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American

students passing the reading / English language arts TAKS test for their grade level.

Several bivariate Spearman correlations were calculated to determine if there was a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school and high school students passing the reading TAKS tests. The analyses were conducted separately for the following 3 school years: 2005–2006, 2006–2007 and 2007-2008.

The descriptive statistics for each variable are listed in Table 6. The correlation matrices for the middle and high schools are listed in Tables 7 and 8, respectively. The tests failed to reveal a significant relationship between the percentage of African-American teachers and the percentage of African-American *middle* school students' passing the reading TAKS tests in the 3 years of the study.

The correlations for the high school students did reveal a different pattern. The tests revealed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American *high* school students' passing the reading TAKS test for all three years of the study. The strongest relationship was during the second year of the study, $r = -.59$, $p < .01$. The negative relationship indicates that the percentage of African-American high school students passing the reading TAKS decreased significantly as the number of African-American teachers increased.

Table 6

Descriptive Statistics for Research Question 2

Variable	M	SD	N
% African American Middle School Teachers 2005-2006	16.6	17.3	50

Middle School Reading Score 2005-2006	78.7	6.9	50
% African American Middle School Teachers 2006-2007	18.1	18.1	50
Middle School Reading Score 2006-2007	85.4	5.7	50
% African American Middle School Teachers 2007-2008	19.5	18.8	50
Middle School Reading Score 2007-2008	87.0	6.6	50
% African American High School Teachers 2005-2006	8.9	8.8	50
High School Reading Score 2005-2006	87.6	5.4	50
% African American High School Teachers 2006-2007	9.4	9.9	50
High School Reading Score 2006-2007	87.0	5.6	50
% African American High School Teachers 2007-2008	10.3	11.3	50
High School Reading Score 2007-2008	86.1	5.8	50

Table 7

Spearman Correlations for Middle School Reading / English Language Arts Scores

Schools	r
Middle Schools 2005-2006	-.26
Middle Schools 2006-2007	.01
Middle Schools 2007-2008	-.17

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

Table 8

Spearman Correlations for High School Reading / English Language Arts Scores

Schools	r
High Schools 2005-2006	-.51**
High Schools 2006-2007	-.59**
High Schools 2007-2008	-.43**

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

Research Question 3. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the math TAKS test for their grade level?

H_0 : There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the math TAKS test for their grade level.

H_A : There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the math TAKS test for their grade level.

Several bivariate Spearman correlations were calculated to determine if there was a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school and high school students passing the math TAKS tests. The analyses were conducted separately for the following 3 school years: 2005–2006, 2006–2007 and 2007-2008.

The descriptive statistics for each variable are listed in Table 9. The correlation matrices for the middle and high schools are listed in Tables 10 and 11, respectively. The

tests failed to reveal a significant relationship between the percentage of African-American teachers and the percentage of African-American *middle* school students' passing the math TAKS test in the first 2 years of the study. However, there was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American students passing the math TAKS in the last year of the study, $r = -.33, p < .05$. This indicates that students' math scores decreased significantly as the number of African-American teachers increased for the 2007-2008 school year.

The correlations for the high school students revealed a different pattern. The tests revealed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American *high* school students' passing the math TAKS test for all three years of the study. The strongest relationship was during the second year of the study, $r = -.64, p < .01$. The negative relationship indicates that the percentage of African-American high school students passing the math TAKS decreased significantly as the number of African-American teachers increased.

Table 9

Descriptive Statistics for Research Question 3

Variable	M	SD	N
% African American Middle School Teachers 2005-2006	16.6	17.3	50
Middle School Math Score 2005-2006	58.6	11.6	50
% African American Middle School Teachers 2006-2007	18.1	18.1	50
Middle School Math Score 2006-2007	65.8	9.7	50
% African American Middle School Teachers 2007-2008	19.5	18.8	50

Middle School Math Score 2007-2008	70.6	10.6	50
% African American High School Teachers 2005-2006	8.9	8.8	50
High School Math Score 2005-2006	54.2	11.9	50
% African American High School Teachers 2006-2007	9.4	9.9	50
High School Math Score 2006-2007	58.3	11.4	50
% African American High School Teachers 2007-2008	10.3	11.3	50
High School Math Score 2007-2008	58.8	11.7	50

Table 10

Bivariate Spearman Correlations for Middle School Math Scores

Schools	r
Middle Schools 2005-2006	-.22
Middle Schools 2006-2007	-.27
Middle Schools 2007-2008	-.33

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

Table 11

Bivariate Spearman Correlations for High School Math Scores

Schools	r
High Schools 2005-2006	-.44**
High Schools 2006-2007	-.64**
High Schools 2007-2008	-.47**

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

Research Question 4. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the science TAKS test for their grade level?

H_0 : There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the science TAKS test for their grade level.

H_A : There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the science TAKS test for their grade level.

Several bivariate Spearman correlations were calculated to determine if there was a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school and high school students passing the science TAKS tests. The analyses were conducted separately for the following 3 school years: 2005–2006, 2006–2007 and 2007-2008.

The descriptive statistics for each variable are listed in Table 12. The correlation matrices for the middle and high schools are listed in Tables 13 and 14, respectively. The tests revealed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American *middle* school students' passing the science TAKS test in the first 2 years of the study, $r = -.41, p < .01$ and $r = -.36, p < .05$. This indicates that the percentage of students passing the science test decreased as the number of African-American teachers increased. However, there was not a significant relationship between the percentage of African-American teachers and

the percentage of African-American students passing the science TAKS in the last year of the study, $r = .01, p > .05$.

The correlations for the high school students revealed a similar pattern. The tests revealed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American *high* school students' passing the science TAKS test for all three years of the study. The strongest relationship was during the first year of the study, $r = -.50, p < .01$. The negative relationship indicates that the percentage of African-American high school students passing the science TAKS decreased significantly as the number of African-American teachers increased.

Table 12

Descriptive Statistics for Research Question 4

Variable	M	SD	N
% African American Middle School Teachers 2005-2006	16.6	17.3	50
Middle School Science Score 2005-2006	54.8	20.7	49
% African American Middle School Teachers 2006-2007	18.1	18.1	50
Middle School Science Score 2006-2007	52.5	23.4	49
% African American Middle School Teachers 2007-2008	19.5	18.8	50
Middle School Science Score 2007-2008	54.8	22.1	49
% African American High School Teachers 2005-2006	8.9	8.8	50
High School Science Score 2005-2006	57.1	13.9	49
% African American High School Teachers 2006-2007	9.4	9.9	50
High School Science Score 2006-2007	56.0	12.4	48
% African American High School Teachers 2007-2008	10.3	11.3	50
High School Science Score 2007-2008	62.8	10.5	48

Table 13

Spearman Correlations for Middle School Science Scores

Schools	r
Middle Schools 2005-2006	-.41**
Middle Schools 2006-2007	-.36*
Middle Schools 2007-2008	.01

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

Table 14

Spearman Correlations for High School Science Scores

Schools	r
High Schools 2005-2006	-.50**
High Schools 2006-2007	-.48**
High Schools 2007-2008	-.49**

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

Research Question 5. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the writing TAKS test?

H_0 : There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the writing TAKS test.

H_A : There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the writing TAKS test.

Several bivariate Spearman correlations were calculated to determine if there was a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the writing TAKS test. The analyses were conducted separately for the following 3 school years: 2005–2006, 2006–2007 and 2007-2008.

The descriptive statistics for each variable are listed in Table 15. The correlation matrix is presented in Table 16. The tests revealed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American *middle* school students' passing the writing TAKS test in the last year of the study, $r = -.31, p < .05$. This indicates that the percentage of African-American students passing the writing test decreased as the number of African-American teachers increased during that year. However, there was not a significant relationship between the percentage of African-American teachers and the percentage of African-American students passing the writing TAKS test in the first 2 years of the study, $r = -.18, p > .05$ and $r = .08, p > .05$.

Table 15

Descriptive Statistics for Research Question 5

Variable	M	SD	N
% African American Middle School Teachers 2005-2006	16.3	17.3	49
Middle School Writing Score 2005-2006	89.6	5.4	50
% African American Middle School Teachers 2006-2007	18.1	18.1	50
Middle School Writing Score 2006-2007	92.0	4.8	49

% African American Middle School Teachers 2007-2008	19.5	18.8	49
Middle School Writing Score 2007-2008	92.0	5.9	49

Table 16

Spearman Correlations for Middle School Writing Scores

Schools	r
Middle Schools 2005-2006	-.18
Middle Schools 2006-2007	-.08
Middle Schools 2007-2008	-.31*

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

Research Question 6. Is there a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the social studies TAKS test for their grade level?

H_0 : There is no significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the social studies TAKS test for their grade level.

H_A : There is a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the social studies TAKS test for their grade level.

Several bivariate Spearman correlations were calculated to determine if there was a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school and high school students passing

the social studies TAKS tests. The analyses were conducted separately for the following 3 school years: 2005–2006, 2006–2007 and 2007–2008.

The descriptive statistics for each variable are listed in Table 17. The correlation matrices for the middle and high schools are listed in Tables 18 and 19, respectively. The tests revealed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American *middle* school students' passing the social studies TAKS test in the first 2 years of the study, $r = -.53$ $p < .01$ and $r = -.30$, $p < .05$. This indicates that the percentage of African-American students passing the social studies test decreased as the number of African-American teachers increased. However, there was not a significant relationship between the percentage of African-American teachers and the percentage of African-American students passing the social studies TAKS in the last year of the study, $r = -.24$, $p > .05$.

The correlations for the high school students revealed a similar pattern. The tests revealed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American *high* school students' passing the social studies TAKS test for all three years of the study. The strongest relationship was during the first year of the study, $r = -.51$, $p < .01$. The negative relationships indicates that the percentage of African-American high school students passing the social studies TAKS decreased significantly as the number of African-American teachers increased during the course of the study.

Table 17

Descriptive Statistics for Research Question 6

Variable	M	SD	N
----------	---	----	---

% African American Middle School Teachers 2005-2006	16.6	17.3	50
Middle School Social Studies Score 2005-2006	83.1	10.6	49
% African American Middle School Teachers 2006-2007	18.1	18.1	50
Middle School Social Studies Score 2006-2007	86.8	7.8	49
% African American Middle School Teachers 2007-2008	19.5	18.8	50
Middle School Social Studies Score 2007-2008	89.9	6.5	49
% African American High School Teachers 2005-2006	8.9	8.8	50
High School Social Studies Score 2005-2006	87.1	7.8	48
% African American High School Teachers 2006-2007	9.4	9.9	50
High School Social Studies Score 2006-2007	85.3	8.0	48
% African American High School Teachers 2007-2008	10.3	11.3	50
High School Social Studies Score 2007-2008	90.0	4.7	48

Table 18

Spearman Correlations for Middle School Social Studies Scores

Schools	r
Middle Schools 2005-2006	-.53**
Middle Schools 2006-2007	-.30*
Middle Schools 2007-2008	-.24

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

Table 19

Spearman Correlations for High School Social Studies Scores

Schools	r

High Schools	2005-2006	-.51**
High Schools	2006-2007	-.47**
High Schools	2007-2008	-.40**

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

Research Question 7. Is there a significant relationship between the percentage of African-American teachers on a given campus and average African-American student's scores on the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT) test?

H_0 : There is no significant relationship between the percentage of African-American teachers on a given campus and average African-American student's scores on the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT) test.

H_A : There is a significant relationship between the percentage of African-American teachers on a given campus and average African-American student's scores on the Scholastic Aptitude Test (SAT) and the American College Testing Program (ACT) test.

Several bivariate Spearman correlations were calculated to determine if there was a significant relationship between the percentage of African-American teachers and African-American high school students' ACT and SAT scores. The analyses were conducted separately for the following 3 school years: 2005–2006, 2006–2007 and 2007–2008.

The descriptive statistics for each variable are listed in Table 20. The correlation matrix is presented in Table 21. The tests revealed a significant negative relationship

between the percentage of African-American teachers and African-American students' SAT test scores for all 3 years of the study. This indicates that the SAT scores of the African-American students decreased as the number of African-American teachers increased over the course of the study. There was a significant negative relationship between the percentage of African-American teachers and the students' ACT scores during the second year of the study, $r = -.37, p < .05$. The relationships with ACT scores for the first and third years of the study were not significant.

Table 20

Descriptive Statistics for Research Question 7

Variable	M	SD	N
% African American High School Teachers 2005-2006	8.9	8.8	50
SAT Scores 2005-2006	882.4	56.1	39
ACT Scores 2005-2006	17.8	1.4	36
% African American High School Teachers 2006-2007	9.4	9.9	50
SAT Scores 2006-2007	890.6	61.5	41
ACT Scores 2006-2007	17.9	1.6	40
% African American High School Teachers 2007-2008	10.3	11.3	50
SAT Scores 2007-2008	901.1	57.5	43
ACT Scores 2007-2008	17.5	1.4	40

Table 21

Spearman Correlations for SAT & ACT Scores

Schools	r
High School SAT 2005-2006	-.34*

High School SAT	2006-2007	-45**
High School SAT	2007-2008	-47**
High School ACT	2005-2006	-.26
High School ACT	2006-2007	-.37*
High School ACT	2007-2008	-.25

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

Chapter V

Summary and Discussion

The purpose of this chapter is to review the research problem, summarize the methodology, and to interpret the results of the research. It will also discuss their implications.

Statement of the Problem

The purpose of the study was to examine the relationship between the percentage of African-American teachers on secondary public school campuses and the percentage of African-American students passing the Texas Assessment of Knowledge and Skills test (TAKS) on those campuses.

Review of the methodology

The subjects for this study consisted of African-American students from 50 randomly chosen middle schools and high schools from region 10 of Texas. The grades considered for the study were 6th thru 11th. The TAKS testing data for a 3 year period (2005-2008) was examined to see if there was a relationship between the percentage of African-American teachers on campus and African-American student test scores. Scholastic Aptitude Test (SAT) and American College Test (ACT) scores were also examined from the 50 high schools as well. The TAKS subject areas examined by the study were mathematics, reading, writing, language arts, science, and social studies.

Bivariate Spearman correlations were conducted to determine if a relationship existed between the percentage of African-American teachers on a given campus and African-American student TAKS scores. Bivariate Spearman correlations were conducted separately for middle school (6-8) and high school (9-11) campuses. Within

these categories bivariate Spearman correlations were conducted using mathematics, reading, writing, language arts, science, and social studies TAKS scores. Bivariate Spearman correlations were also conducted for SAT and ACT scores. All correlations were conducted using TAKS, SAT, and ACT data from 2006 to 2008. Significance was determined at the .05 and .01 levels.

Summary of the results

Several bivariate Spearman correlations were calculated to determine if there was a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school and high school students passing the TAKS tests. Bivariate Spearman correlations were also calculated to determine if there was a significant relationship between the percentage of African-American teachers on a selected campus and average African-American high school SAT and ACT scores on those campuses.

The bivariate Spearman correlations showed that there were significant negative relationships between the percentage of African-American teachers and the percentage of African-American secondary students passing their TAKS tests or that there were no significant relationships at all. The bivariate Spearman correlations calculated on the relationship between the percentage of African-American teachers on selected campuses and average African-American high school SAT and ACT scores showed similar patterns.

The correlations from the middle school data showed no significant relationships between the percentage of African-American teachers and the percentage of African-American middle school students passing all grade required subject areas of their TAKS

tests during the first year of the study. There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American students passing all grade required subject areas of their TAKS test for the last two years of the study. There were no significant relationships between the percentage of African-American teachers and the percentage of African-American middle school students passing the TAKS reading test during all three years of the study. There were no significant relationships between the percentage of African-American teachers and the percentage of African-American middle school students passing the mathematic tests during the first and second years of the study. There was a significant negative relationship between the percentage of African-American middle school teachers and the percentage of African-American students passing the math TAKS in the last year of the study. There were no significant relationships between the percentage of African-American teachers and the percentage of African-American middle school students passing the science tests during the last year of the study. There was a significant negative relationship between the percentage of African-American middle school teachers and the percentage of African-American students passing the science TAKS in the first two years of the study. There were no significant relationships between the percentage of African-American teachers and the percentage of African-American middle school students passing the writing tests during the first two years of the study. There was a significant negative relationship between the percentage of African-American middle school teachers and the percentage of African-American students passing the writing TAKS in the last year of the study. There were no significant relationships between the percentage of African-American teachers and the percentage of African-

American middle school students passing the social studies tests during the third year of the study. There was a significant negative relationship between the percentage of African-American middle school teachers and the percentage of African-American students passing the social studies TAKS during the first two years of the study.

The correlations from the high school data showed significant negative relationships between the percentage of African-American teachers and the percentage of African-American students passing all grade required subject areas of their TAKS test for all three years of the study. There were no significant relationships between the percentage of African-American teachers and the percentage of African-American high school student's average ACT scores during the first and third year of the study.

Discussion of the results

The researcher hypothesized that there would be a significant relationship between the percentage of African-American teachers on a given campus and the percentage of African-American students passing the Texas Assessment of Knowledge and Skills (TAKS) test. The researcher also hypothesized that there would also be a significant relationship between the percentage of African-American teachers on a given campus and African-American student averages on the Scholastic Aptitude Test (SAT) and the American College Test (ACT).

The correlations showed a significant negative relationship between the percentages of African-American students passing all grade level required TAKS tests or showed no significance at all. Many previous research studies detailed the benefits of African-American student success associated with same race mentorship opportunities (Bright, Duefield, & Stone, 1988). The correlations from this study showed that as the

percentage of African-American teachers increased, the percentage of African-American students passing all required TAKS tests decreased. The correlations conducted for the first years of the study (2005-2006) showed no significance at the middle school level, $r = -.23, p > .05$. The last two years of the study (2006-2007 & 2007-2008) revealed a significant negative relationship at the middle school level, $r = -.32, p < .05$. There was a significant negative relationship for all three years of the study at the high school level. The strongest negative relationship occurred during the second year of the study (2006-2007), $r = -.62, p < .01$.

The researcher hypothesized that there would be a significant relationship between the percentage of African-American teachers on campus and African-American students passing percentages on the reading / English language arts TAKS test. The correlations did not show a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the reading test. This was true for all three years of the study (2005-2006, 2006-2007, and 2007-2008). There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American high school students passing the reading/ language arts test. The correlations from the study showed that as the percentage of African-American teachers increased, the lower the percentage of African-American students passing the TAKS reading / English language arts test. The strongest negative relationship occurred during the second year of the study (2006-2007), $r = -.59, p < .01$.

The researcher hypothesized that there would be a significant relationship between the percentage of African-American teachers on campus and African-American

students passing percentages on the mathematics TAKS test. Previous research studies have shown significant relationships between African-American teacher influence and African-American student mathematics achievement (Klopfenstein, 2005). The correlations did not show a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the mathematics test during the first two years of the study (2005-2006 & 2006-2007). The last year of the study showed a significant negative relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the mathematics test, $r = -.33$, $p < .05$. The correlations from the study during the last year showed that as the percentage of African-American teachers increased, the lower the percentages of African-American middle school students passing the TAKS mathematics test. There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American high school students passing the mathematics tests. The strongest negative relationship occurred during the second year of the study (2006-2007), $r = -.64$, $p < .01$. This was true for all three years of the study, (2005-2006, 2006-2007, & 2007-2008). The correlations from the study showed that as the percentage of African-American teachers increased, the lower the percentages of African-American students passing the TAKS mathematics test or that there was no significant effect at all. The researcher hypothesized that there would be a significant relationship between the percentage of African-American teachers on campus and African-American students passing percentages on the science TAKS test. Studies have shown that same race role models have a significant effect on African-American student science achievement, (King, 1993).

There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the science TAKS tests for the first two years of the study (2005-2006), $r = -41, p < .01$ and (2006-2007), $r = -.36, p < .05$. There was not a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the science TAKS tests during the last year of the study, (2007-2008). There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American high school students passing the science TAKS test for all three years of the study. The strongest negative relationship occurred during the first year of the study (2005-2006), $r = .01, p > .05$. The correlations from the study showed that as the percentage of African-American teachers increased, the lower the percentages of African-American students passing the TAKS science test or that it had no significant effect at all.

The researcher hypothesized that there would be a significant relationship between the percentage of African-American teachers on campus and African-American middle school students passing percentages on the writing TAKS test. There was not a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the writing TAKS test during the first two years of the study (2005-2006). There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the writing TAKS test during the last year of the study (2007-2008), $r = -31, p < .05$. The correlations from the study showed that as the percentages of African-American teachers increased, the lower the percentages

of African-American middle school student's passing the TAKS writing test or that it had no significant effect at all.

The researcher hypothesized that there would be a significant relationship between the percentage of African-American teachers on campus and African-American students passing percentages on the social studies TAKS test. There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the social studies TAKS test during the first two years of the study (2005-2006 & 2006-2007), $r = -.53$ $p < .01$ and $r = -.30$, $p < .05$. There was not a significant relationship between the percentage of African-American teachers and the percentage of African-American middle school students passing the social studies TAKS test during the last year of the study (2007-2008). There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American high school students passing the science TAKS test for all three years of the study. The strongest negative relationship occurred during the first year of the study (2005-2006), $r = -.51$, $p < .01$. The correlations from the study showed that as the percentage of African-American teachers increased, the lower the percentages of African-American students passing the TAKS social studies test or that it had no significant effect at all.

The researcher hypothesized that there would be a significant relationship between the percentage of African-American teachers on campus and African-American high school student's average scores on the SAT and ACT tests. There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American high school student's average scores on the SAT for all

three years of the study. The strongest negative relationship occurred during the last year of the study, $r = -.47$ $p < .01$. There was not a significant relationship between the percentage of African-American teachers and the percentage of African-American high school student's average scores on the ACT test during the first and third year of the study (2005-2006 & 2007-2008). There was a significant negative relationship between the percentage of African-American teachers and the percentage of African-American high school student's average scores on the ACT for the second year of the study (2006-2007), $r = -.37$, $p < .05$. The correlations from the study showed that as the percentage of African-American teachers increased, the African-American student's average SAT and ACT score decreased or had no significant effect at all.

The results from this study may have been influenced by factors other than the percentage of African-American teachers on a given campus. When comparing the AEIS reports from the schools with the highest percentage of African-American teachers with the schools with the lowest percentage of African-American teachers, certain factors became apparent (Appendix G).

At the middle school level, African-American teachers tended to teach at schools with higher percentages of African-American students. Using the 2008 AEIS report as a baseline, the five campuses with the largest percentages of African-American teachers averaged 56.8% African-American students on their campuses. The five campuses with the lowest percentage of African-American teachers averaged 16.7% African-American students on their campuses. A substantial amount of research has established that there is an achievement gap between African-American students and white students. Having more students on campus with an achievement gap makes it more challenging for

teachers to raise TAKS scores. Students on these campuses also have fewer opportunities to learn from students not affected by an achievement gap.

African-American high school teachers also tended to teach at campuses with high percentages of African-American students. The five campuses with the highest number of African-American teachers averaged 73.5% African-American students on their campuses. The five campuses with the lowest number of African-American teachers averaged 9.9% African-American students on their campuses. The tendency for African-American teachers to be on campuses with large numbers of African-American students (achievement gap) could contribute to the results discovered in chapter four of this study.

African-American teachers tended to teach on campuses with higher percentages of economically disadvantaged students. At the middle school level, the five schools with the highest percentage of African-American teachers averaged 63.2% economically disadvantaged students on their campuses. The five schools with the lowest percentage of African-American teachers averaged 54.7% economically disadvantaged students on their campuses. High school campuses showed similar trends.

The five high schools with the highest percentage of African-American teachers averaged 49.6% economically disadvantaged students on their campuses. The five campuses with the lowest percentage of African-American teachers on campus averaged 18.3% on their campuses. The tendency for African-American teachers to be on campuses with large numbers of economically disadvantaged students could contribute to the results discovered in chapter four of this study.

African-American teachers tended to be on campuses with higher percentages of at risk students. At the middle school level, the five schools with the highest percentages of African-American teachers averaged 46.7% at risk students on their campuses. The five campuses with the lowest amount of African-American teachers averaged 45.7% at risk students on their campuses. High school campuses showed similar trends.

The five high school campuses with the highest percentage of African-American teachers averaged 62.1% at risk students on their campuses. The five high school campuses with the lowest percentage of African-American teachers averaged 20.4% at risk students on their campuses. The tendency for African-American teachers to be on campuses with large numbers of at risk students could contribute to the results discovered in chapter four of this study.

There are numerous factors that have an effect on the relationship between the percentage of African-American teachers on a given campus and African-American student TAKS scores. African-American teachers tend to teach on campuses with large percentages of African-American students, economically disadvantaged students, and at risk students. These factors can have a negative impact on African-American student campus TAKS scores and may have contributed to the results discovered in this study.

Relationship of the current study to previous research

Previous research studies have shown how African-American students benefit from being associated with African-American teachers. Dee (2001) reported that African-American kindergarten students who had African-American teachers, scored higher in reading and math than African-American students who did not have teachers of the same race. Klopfenstein (2005) discovered that increasing the number of African-

American mathematics teachers on campus increased the number of African-American students taking higher level math courses. Downey and Pribesh (2004) reported that African-American teacher behavior evaluations of African-American students were more favorable than white teacher's evaluations of African-American students. Herrera (1998) reported that African-American teachers refer African-American male student to special education programs at a lower rates than white teachers.

There are obviously benefits for African-American students being taught by or associated with African-American teachers. The present study however did not find the positive benefits in terms of academic achievement based on TAKS scores. The study showed either a significant negative relationship between the percentage of African-American teachers and the percentage of African-American students passing their TAKS test or no significant relationship at all.

The current study contributes to a limited amount of research which does not show a significant relationship between African-American teachers or other African-American role models and African-American achievement. Sheehan and Marcus (1977) reported that matching students on the basis of race was ineffective at increasing vocabulary and mathematic scores on the Iowa Test of Basic Skills (ITBS) and the Metropolitan Readiness Test (MRT) for African-American students. Ferguson (1998) reported that biases in teacher perceptions and expectations help to maintain and possibly expand the African-American achievement gap. He points out that this is a problem for both black and white teachers and is highly critical of recommendations to assign students and teachers by race as "too simple a prescription." Holmes (2006) discovered that achievement in science by blacks is found to have more to do with a cultural

understanding and certification by the teacher rather than race. A study conducted by Casteel (2000) showed that African-American suburban low-socioeconomic seventh grade students did not believe their race was a factor in the way in which their Caucasian teachers treated them. They felt that they were treated fairly and grades good or bad were not related to their race.

Implications of the study

The current study showed a significant negative relationship between the percentages of African-American students passing all grade level required TAKS tests or showed no significance at all. The negative relationship was also true for average African-American average SAT and ACT scores. One of the objectives of No Child Left Behind (NCLB) act was to address the achievement gap. Educators must understand that there are no simple solutions to this problem. Scholars do not even agree upon the causes of the achievement gap and offer a multitude of possible solutions (Books, 2007, pp. 12-15). Simply increasing the percentage of African-American teachers on campus will not necessarily have a significant effect on African-American student achievement. The context of the campus must also be taken into consideration.

High percentages of African-American teachers in this study tended to teach on campuses which contained significant challenges to academic achievement. They were on campuses with the highest percentages of African-American students (achievement gap), the highest percentages of economically disadvantaged students, and the highest percentages of at risk students. Large percentages of any one of these factors could have a negative effect on TAKS scores when compared to campuses with lower percentages of these factors. Teaching on campuses with all three factors could pose a significant

challenge to student academic achievement. This could explain why there was a negative relationship between the percentage of African-American teachers on a given campus and African-American student TAKS scores in this study.

Educators must consider more than a teacher's race when making staffing decisions. Numerous research studies show the positive aspects of African-American students being associated with African-American teachers and or mentors. No matter the race of the teacher, he or she must possess the skills that promotes student learning. Fabry (2010) stated that teachers who use research-based instructional strategies increases student engagement and student achievement. This is true regardless of the race of the teacher or students. It is evident that African-American students need to have same-race role models on campus. Educators must ensure that they are hiring the most qualified African-American teachers in order to have a positive effect on African-American student achievement. When reviewing the results of hiring practices, the context of the campus must be addresses as well. Hiring teachers based solely on race may not have the intended effect.

Limitations of the study

The study was limited by the geographic location and number of research participants. The subjects came from a random sample of students from 50 middle schools and 50 high schools from region ten in North Texas. The results from the study may not be effectively generalized to other geographic locations. The study only used 50 randomly selected middle schools and 50 randomly selected high schools. A larger sample may have been a better representation of the population of African-American students on North Texas secondary school campuses.

The instrument used to assess achievement was the Texas Assessment of Knowledge and Skills (TAKS) test. The TAKS test is based upon the Texas required curriculum. The achievement results from the study may not be generalized to other regions that use other state required assessments and curriculum. The study also used only three years of testing data (2005-2008). Data from a longer amount of time might have been able to show trends not detected in the three year period.

The study did not measure or track the actual amount of time African-American students spent with African-American teachers on campus. The study did not want to measure African-American student achievement in terms of who had African-American teachers and who had Caucasian teachers only. On secondary campuses, there are numerous opportunities for African-American students and African-American teachers to interact. This includes passing period, tutorials, extracurricular activities, lunch, and other opportunities to interact. Not recording and factoring in the actual amount time African-American students interacted with African-American teachers limited the study.

The study was limited by the fact that African-American teachers often times teach in school districts and campuses with large amounts of African-American students (Alexander & Fuller, 2003). Since African-American students score lower on achievement tests (achievement gap) the TAKS test passing percentage rate would be lower. The relationship between the percentage of African-American teachers on campus and the percentage of African-American students passing the TAKS test would show a significantly negative relationship. This is due to the presence of large percentages of African-American teachers on campuses with large percentages of African-American students.

Recommendations for further research

This study adds to the increasing amount of literature relationship between African-American teachers and African-American student's achievement. The study focused on secondary teachers and students. The researcher recommends that future studies include African-American elementary school teachers and African-American elementary school students. This would give a comprehensive look at the research question by starting at the beginning of the student's educational experience.

The researcher recommends that the period studied be increased from three years to ten years with a sample of 500 schools. This would give a more complete picture of the relationship between African-American teachers and African-American student achievement. The three year period is a snapshot and is not long enough to show trends. A period of ten or more years would show if a particular year was atypical or not.

Future studies should narrow its scope from researching the relationship between the percentages of African-American teachers on a given campus to individual classrooms. These studies would investigate African-American student achievement based on if they had an African-American teacher or not. This could be researched in all TAKS tested subject areas.

Conclusion

The study showed that there were significant negative relationships between the percentage of African-American teachers and the percentage of African-American secondary students passing their TAKS tests or that there were no significant relationships at all. This was true for all TAKS tested subject areas. These results must be considered along with the vast amount of literature reporting positive relationships

between African-American teachers and African-American students. When addressing the achievement gap, all solutions must be considered to include the demographics of the teachers. The study also showed that merely increasing the number of African-American teachers on campus may not necessarily increase African-American student achievement. There are many other factors to consider such as teacher quality, experience, and subject matter expertise. Educators must ensure that staffing decisions are not based solely on race. Increasing African-American achievement is a challenging issue and must be addressed by multiple strategies.

Bibliography

- Aaron, R., & Powell, G. (1982). Feedback practices as a function of teacher and pupil race during reading group instruction. *Journal of Negro Education*, 51, 50-59.
- Abeille, A. & Hurley, N. (2000). How massachusetts schools are using mcas to change curriculum, assessment and resource allocation. Boston: MA Education Reform Review Commission.
- 2004 ACT national and state scores (2005). Retrieved January 18, 2009, from <http://www.act.org/news/data/04/charts/text.html>
- Academic Excellence Indicator System. (n.d.). Retrieved May, 15, 2009, from <http://ritter.tea.state.tx.us/perfreport/aeis/index.html>
- Ainsworth-Darnell, J.W. & Douglas, B. D. (1998). "Assessing the oppositional culture explanation for racial/ethnic differences in school performance" *American Sociological Review*, 63, 536-53.
- Arnold, K. D. (1993). Undergraduate aspirations and career outcomes of academically talented women: a discriminant analysis. *Roeper Review*, 15, 169–175.
- Ainsworth-Darnell, J.W., & Downey, D.B. (1998). Assessing the oppositional culture explanation for racial/ethnic differences in school performance. *American Sociology Review*, 63, 536-653.
- Ascher, C. (1991). School programs for african american students (Report No. 72). New York, NY: ERIC Clearinghouse on Urban Education. (ERIC Document Reproduction Service No. ED334340)
- Bacon, E., Banks, J., Young, K., & Jackson, R.J. (2007). Perceptions of american and

- european american teachers on the education of african american boys. *Multiple Voices for Ethnically Diverse Exceptional Learners*, 10(1&2), 160-172.
- Baker, J.A. (1999). Teacher-student interaction in urban at-risk classrooms: differential behavior, relationship quality, and student satisfaction with school. *The Elementary School Journal*, 100(1), 57-70.
- Baker, J.A., Grant, S., & Morlock, L. (2008). The teacher-student relationship as a developmental context for children with internalizing or externalizing behavior problems. *School Psychology Quarterly*, 23(1), 3–15.
- Baker, P. (2005). The impact of cultural biases on african american students' education: a review of research literature regarding race-based schooling. *Education and Urban Society*, 37(3), 243-256.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior*. (pp. 71-81). New York: NY.
- Bandura, A. (1995). *Self-Efficacy in changing societies*. Cambridge, MA: University Press.
- Baron, R., Tom, D., & Cooper, H. (1985). Social class, race, and teacher expectations. In J. B. Dusek (Ed.), Teacher expectancies (pp. 251-269). Hillsdale, NJ: Lawrence Erlbaum.
- Barth, P. (2001). Youth at the crossroads: facing high school and beyond. *Thinking K-16*, 5(1), 1–24.
- Barton, P.E. (2003). Parsing the achievement gap. Princeton, NJ: Educational Testing Service.
- Beady, C., & Hansell, S. (1981). Teacher race and expectations for student achievement.

- American Educational Research Journal*, 18, 191–206.
- Berry, R. Q. (2003). Voices of african american male middle school students: A portrait of successful middle school mathematics students. Unpublished doctoral dissertation, University of North Carolina, Chapel Hill.
- Berry, R. Q. (2004). The equity principle through the voices of african american males. *Mathematics Teaching in the Middle School* 10(2), 100-103.
- Blanchett, W. J. (2006). Disproportionate representation of african-american students in special education: Acknowledge the role of white privilege and racism. *Educational Researcher*, 35, 24-28.
- Bol, L., & Berry R.Q. (2005). Secondary mathematics teachers' perceptions of the achievement gap. *The High School Journal*, 88(4), 32-46.
- Books, S. (2007). What are we talking about when we talk about “closing the achievement gap?” *The International Journal of Learning*. 14(2) 11-17.
- Brophy, J. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology*, 75, 631-661.
- Bright, C.M., Duefield, C.A., & Stone, V.E. (1998). Perceived barriers and biases in the medical education experience by gender and race. *Journal of the National Medical Association*. 90, 681-688.
- Bruschi, B.A., & Anderson, B.T. (2004). *Gender and ethnic differences in science achievement of nine-, thirteen-, and seventeen-year-old students*. Sarasota, FL: Eastern Educational Research Association. (ERIC Documentation Reproduction Service No. ED382751).
- Bush, G.W. (2004). The essential work of democracy. *Phi Delta Kappan*, 86(2), 114-

- 121.
- Caruthers, L. (1995). Classroom interactions and achievement. In S.C. Berger (Ed.), *What's noteworthy on learners, learning, and schooling?* (pp. 13-18). Aurora: CO.
- Teachers College of Columbia University. (2005). *The academic achievement gap: Facts and figures*. Retrieved January 2009 from: <http://www.tc.edu/news/article.htm?id=5183>
- Cooper, A. & Schleser, R. (2006). Closing the achievement gap: Examining the role cognitive developmental level in academic achievement. *Early Childhood Education Journal*, 33(5), 301-306.
- Corbett, D., & Wilson, B. (2002). What urban students say about good teaching. *Educational Leadership*, 18-22.
- Council of the Great City Schools (2008, April). Beating the odds an analysis of student performance and achievement gaps on state assessments results from the 2006-2007 school year. Retrieved March 7, 2009, from
http://www.cgcs.org/publications/BTO8_Revised.pdf
- Davis, D.J. (2007). Access to academe: the importance of mentoring to black students. *The Negro Educational Review*, 58(3-4), 217-231.
- Dee, T. (2001). Teachers, race and student achievement (Report No. W8432). Cambridge, MA: National Bureau of Economic Research.
- Decker, D. M., Dona, D. P., & Christenson, S. L. (2007). Behaviorally at-risk african american students: The importance of student-teacher relationships for student outcomes. *Journal of School Psychology*, 45, 83-109.
- Dillon, Sam. (2006, March 26). Schools cut back subjects to push reading and math. *The New York Times*, Sec. 1.
- Downeys, D. B., & Pribesh, S. (2004). When race matters: Teacher's evaluations of

- students' classroom behavior. *Sociology of Education*, 77(10), 267-282.
- Donnelly, M. (1988). *Training and recruiting minority teachers-research* (Report No. EA29). Eugene, OR: Clearinghouse on Educational Management. (ERIC Document Reproduction Service No. ED302898)
- Dreher, G.F., & Cox, T.H., (1996). Race, gender, and opportunity: A study of compensation attainment and the establishment of mentoring relationships. *Journal of Applied Psychology*, 81, (3), 297-308.
- Elhoweris, H., Mutua, K., Alsheikh, N., & Holloway, P. (2004). Effect of children's ethnicity on teacher's referral and recommendation decisions in gifted and talented programs. *Remedial and Special Education*, 26(1), 25-31.
- Entwistle, D. R., & Alexander, K. L. (1988). Factors affecting achievement test scores and marks of black and white first graders. *Elementary School Journal*, 88, 449-471.
- Fair, G. W. (1980). Coping with double barreled discrimination. *Journal of School Health*, 50, 275-276.
- Ferguson, R. F. (2003). Teachers' perceptions and expectations and black-white test score gap. *Urban Education*. 38(4), 460-507.
- Flores, A. (2007). Examining disparities in mathematics education: achievement gap or opportunity gap? *The High School Journal*. 10, 29-42.
- Foley, D.E., Sloan, K., Valencia, R.R. & Valenzuela, A. (2001). Let's treat the cause, not the symptoms: Equity and accountability in Texas revisited. *Phi Delta Kappan* 83(4), 318-321.
- Ford, D. Y. (1994). *The recruitment and retention of african-american students in gifted*

- programs.* Storrs: University of Connecticut, National Research Center on the Gifted and Talented.
- Ford, D.Y. (2006). Closing the achievement gap: How gifted education can help. *Gifted Child Today*, 29(4), 14-18.
- Ford, D. Y., & Harris, J. J., (1996). Perceptions and attitudes of black students toward school, achievement, and other educational variables. *Child Development*, 67, 1141-1152.
- Ford, D.Y., & Webb, K.S. (1994). Desegregation of gifted educational programs: The impact of brown on underachieving children of color. *The Journal of Negro Education*, 63, 358-373.
- Ford, D.Y., & Whiting, G. W. (2008). A mind is a terrible thing to erase: Black students underrepresentation in gifted education. *Multiple Voices*, 10(1 & 2), 28–44.
- Ford, D.Y., Harris, J.J., Tyson, C.A., & Troutman, M.F. (2002). Beyond deficit thinking: Providing access for gifted african american students. *Roeper Review*, 24, 52-58.
- Ford-Harris, D.Y., Schuerger, J. M., & Harris, J.J. (1991). Meeting the psychological needs of gifted black students: A cultural perspective. *Journal of Counseling & Development*, 69, 577-580.
- Fryer, R. G., and Levitt, S. D. (2004). Understanding the black-white test score gap in the first two years of school. *The Review of Economics and Statistics*, 86(2), 447-464.
- Fuhrman, S., Goertz, M. & Duffy, M. (2002, April). Slow down, you move too fast: The politics of making changes in high stakes accountability policies for students. Paper presented at the American Educational Research Association, New Orleans,

LA.

- Gay, G., (2000). Culturally responsive teaching: theory, research and practice. New York NY: Teachers College Press.
- Gay, G. (2007). The rhetoric and reality of nclb. *Race Ethnicity and Education*, 10(3), 279-293.
- Good, T. L. (1981). Teacher expectations and student perceptions: A decade of research. *Educational Leadership*, 38(5), 415-422.
- Good, T. L., & Brophy, J. E. (1987). *Looking in classrooms* (4th ed.). New York: Harper & Row.
- Good, T. L., & Nichols, S. L. (2001). Expectancy effects in the classroom: A special focus on improving the reading performance of minority students in first-grade classrooms. *Educational Psychologist*, 36(2), 113-126.
- Grantham, T. C. (2004). Rocky Jones: Case study of a high-achieving black male's motivation to participate in gifted classes. *Roeper Review*, 26, 208–215.
- Green, S.R. (2001). Closing the achievement gap: Lessons learned and challenges ahead. *Teaching and Change*, 8(2), 215-224.
- Greene, B.A. (1990). Sturdy bridges: the role of african-american others in the socialization of african-american children. *Women and Therapy*, 10, 205-225.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72, 625–638.
- Harmon, D. (2002). They won't teach me: The voices of gifted African American inner city students. *Roeper Review*, 21, 68-75.

- Harris, D.N., & Herrington, C.D. (2006). Accountability, standards, and the growing achievement gap: lessons from the past half-century. *American Journal of Education*, 112, 209-238.
- Harvard Civil Rights Project (2004). Retrieved February 7, 2009, from
<http://www.civilrightsproject.harvard.edu/>
- Hebert, T. P. (2002). Jermaine: A critical case study of a gifted black child living in rural poverty. *Gifted Child Quarterly*, 45, 85-103.
- Herrera, J. (1998). *The disproportionate placement of african americans in special education: An analysis of ten cities* (Report No. UD032524). (ERIC Documentation Reproduction Service No. ED423324)
- Hill, N.E., & Craft, S.A. (2003). Parent-school involvement and school performance:mediated pathways among socioeconomically comparable African american and euro-american families. *Journal of Educational Psychology*, 95(1), 74-83.
- Hodge, R.D., & Cudmore, L. (1986). The use of teacher-judgment measures in the identification of gifted pupils. *Teaching and Teacher Education*. 2, 181-196.
- Horn, L. (1996). Nontraditional undergraduates, trends in enrollment from 1986 to 1992 and persistence and attainment among 1989-1990 beginning postsecondary students (NCES Publication No. 97-578). Washington, DC: U.S. Government Printing Office.
- How No Child Left Behind Benefits African-Americans. (2005). Retreived March 7, 2009, from <http://www.ed.gov/nclb/accountability/achieve/nclb-aa.pdf>
- Huff, R.E., Houskamp, B.M., Watkins, A.V., Stanton, M., & Tavegia, B. (2005). The

- experiences of parents of gifted African American children: A phenomenological study. *Roeper Review*, 27(4), 215-221.
- Hughes, J., & Kwok, O., (2007). Influence of student-teacher and parent-teacher relationships on lower achieving readers' engagement and achievement in the primary grades. *Journal of Educational Psychology*, 99(1), 39-51.
- Hursh, D. (2007). Assessing no child left behind and the rise of neoliberal education policies. *American Educational Research Journal*, 20(10), 1-26.
- Ikpa, V.W., (2003). A longitudinal analysis of the achievement gap between African-americans and european american in the Norfolk public schools district 1996. *Educational Research Quarterly*, 26(4), 38-46.
- Jencks, C., & Phillips M., (1998). *The black-white test score gap*. Washington, DC: Brookings Institution.
- Jeynes, W. H. (2008). A meta-analysis of the relationship between phonics instruction and minority elementary school student academic achievement. *Education and Urban Society*, 40(2), 151-166.
- Johnson, M. L. (1984). Blacks in mathematics: A status report. *Journal for Research in Mathematics Education*, 15(2), 145–153.
- Johnston, R. C., & Viadero, D. (2000). Unmet promise: Raising minority achievement. *Education Week*, 19(27), 1-23.
- Jussim, L., Eccles, J., & Madon, S. (1996). Social perceptions, social stereotypes, and teacher expectations: Accuracy and the quest for the powerful self-fulfilling prophecy. *Advances in Experimental Social Psychology* 28, 281-287.
- Karunanayake, D. & Nauta, M. N. (2004). The relationship between race and students'

- identified career role models and perceived role model influence. *The Career Development Quarterly*, 52 (3), 225-234.
- King, S.H. (1993). The limited presence of african-american teachers. *Review of Educational Research*, 63(2), 115-149.
- Kunjufu, J. (1994). The vanishing african-american teacher. *The Black Collegian*, 20, 160–164.
- Klopfenstein, K. (2005). Beyond test scores: the impact of black teacher role models on rigorous math taking. *Contemporary Economic Policy*, 23(3), 416-429.
- Koschoreck, J.W. (2001). Accountability and educational equity in the transformation of an urban district. *Education and Urban Society* 3(3), 284–304.
- Lee, J. (2006). *Tracking achievement gaps and assessing the impact of NCLB on the gaps: An in-depth look into national and state reading and math outcome trends*. Cambridge, MA: The Civil Rights Project at Harvard University.
- Love, A., & Kruger C.A. (2005). Teach beliefs and student achievement in urban schools serving african american students. *The Journal of Educational Research*, 99(2), 87-98.
- Magnuson, K. A. & Duncan, G. J. (2006). The role of family socioeconomic resources in the black-white test score gap among young children. *Developmental Review*, 26, 365-399.
- Marcus, G., Gross, S., & Seefeldt, C. (1991). Black and white students' perceptions of teacher treatment. *The Journal of Educational Research*, 84, 363-367.
- Martha, S. McCall, M.S., Hauser, C., Cronin, J., Kingsbury, G.G., & Houser, R. (2006).

- Achievement gaps: An examination of differences in student achievement and growth.*
Lake Oswego, OR: Northwest Evaluation Association. (ERIC Documentation
Reproduction Service No. ED498429)
- Martin, D., Martin, M., Gibson, S., & Wilkins, J., (2007). Increasing prosocial behavior
and academic achievement among adolescent african males. *Adolescence*, 42(168),
689-698.
- Martinez, R. L., Jr. (1991). A crisis in the profession: Minority role models in
critically short supply. *Vocational Educational Journal*, 66(4), 24-25, 46.
- Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Student/teacher relations and
attitudes toward mathematics before and after the transition to junior high school.
Child Development, 60, 981-992.
- Milner, H.R., (2006). The promise of black teachers' success with black students.
Educational Foundations. 20, 89-104.
- Mullins, I.V.S., Dossey, J.A., Campbell, J.R., Gentile, C.A., O'Sullivan, C., & Latham,
A. (1994). *NAEP 1992 trends in academic progress: Achievement of u.s. students in
science, 1969 to 1992; mathematics, 1973 to 1992; reading, 1971 to 1992 and
writing, 1984 to 1992* (23-TR01). Washington, DC: National Center for Education
Statistics.
- U.S. Department of Education. (2001). *Educational achievement and black-white
inequality*. Retrieved January 28, 2009 from
<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2001061>.
- National Center for Education Statistics. (2007). *Demographic and school characteristics*

- of students receiving special education in the elementary grades* (NCES Publication No. 2007-05) Jessup, MD: US Department of Education.
- National Center for Education Statistics: Digest of Educational Statistics. (2003b).
- Nations report card: mathematics, race/ethnicity*. Washington, D.C.: U.S. Government Printing Office.
- National Center for Education Statistics. (2003). *Status and Trends in the Education of Blacks* (NCES Publication No. 2003-034). Washington, DC: Hoffman, K and Llagas, C.
- Nobel, J. Davenport, M. Schiel, J. & Pommerich, M. (1999). *High school academic and noncognitive variables related to the act scores of racial/ethnic and gender groups*. (Report No. TM030297). Iowa City, IA: American College Testing Program. (ERIC Document Reproduction Service No. ED435669)
- Nelson-Barber, S. S., & Mitchell, J. (1992). Restructuring for diversity: Five regional portraits. In M. E. Dilworth (Ed.), *Diversity in teacher education: New expectations* (pp. 229-262). San Francisco: Jossey-Bass.
- No Child Left Behind (NCLB) Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002). Retrieved January 2, 2008, from
<http://www.ed.gov/policy/elsec/leg/esea02/107-110.pdf>
- Oakes, J. (1992). Can tracking research inform practice?: Technical, normative, and political considerations. *Educational Researcher*, 21(4), 12-21.
- Oates, G. L. (2003). Teacher-student racial congruence, teacher perceptions, and test performance. *Social Science Quarterly*, 84(3), 508-525.
- Office of the Under Secretary. (2002). No child left behind a desktop reference.

- Washington, DC: U.S. Department of Education. Retrieved January 25, 2009, from
www.ed.gov/offices/OESE/reference
- Olszewski-Kubilius, P. (2006). Addressing the achievement gap between minority children-increasing access and achievement through project excite. *Gifted Child Today*, 29, (2), (28-37).
- Pang, V.O., & Gibson, R. (2001). Concepts of democracy and citizenship: Views of african-american teachers. *The Social Studies*, 92(6), 260-266.
- Papalia, D. E. & Olds, S.W. (1989). *Human Development*, New York, NY: McGraw-Hill Company.
- Parsons, C. P., Travis, C., & Simpson, S.S. (2005). The black cultural ethos, student's instructional context preferences, and student achievement: An examination of culturally congruent science instruction in eighth grade classes of one African-american and one euro-american teacher. *The Negro Educational Review*, 56(2), 183-203.
- Perna , L. W. & Titus, M. A. (2005). The relationship between parental involvement as social capital and college enrollment: an examination of racial/ethnic group differences. *The Journal of Higher Education*, 76(5), 485-518.
- Pigott, R. L., & Cowen, E. L. (2000). Teacher race, child race, racial congruence, and teacher ratings of children's school adjustment. *Journal of School Psychology*, 38, 177-196.
- Proctor, C. (1984). Teacher expectations: A model for school improvement. *The Elementary School Journal*, 84, 469-481.
- Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., et

- al. (1997). Protecting adolescents from harm: findings from the national longitudinal study on adolescent health. *Journal of the American Medical Association*, 278, 823–832.
- Riley, R. W. (1998). Our teachers should be excellent, and they should look like america. *Education and Urban Society*, 3(1), 18-29.
- Robertson, H. (2008). Eradicating the achievement gap. *Black History Bulletin*, 71(1), 35-38.
- Salathe, J. P. (2002). *Recruitment and hiring of minority teachers to provide a better learning environment for all children*. Retrieved October 22, 2007, from www.arc.org/gripp/researchPublications/publications/recruitment.pdf
- Scott-Jones, D., & Clark, M. L. (1986). The school experiences of black girls: The interaction of gender, race, and socioeconomic status. *Phi Delta Kappan*, 67(7), 520-526.
- Shettle, C., Roey, S., Mordica, J., Perkins, R., Nord, C., Teodorovic, J., Brown, J., Lyons, M., Averett, C., Kastberg, D. (2007). *The Nation's Report Card: America's High School Graduates* (NCES 2007-467). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Silver, S. (2000). GEAR UP: A capstone for reform. Washington, DC: U.S. Department of Education.
- Slavin, R. E., (1990). Achievement effects of ability grouping in secondary schools: A best-evidence synthesis. *Review of Educational Research*, 60(3), 471-499.
- Taylor, J. (2005). Achieving excellence in urban schools: Pitfalls, pratfalls, and evolving opportunities. *The Negro Educational Review*, 56(4), 259-283.

- Tenenbaum, H. R., & Ruck, M. D. (2007). Are teachers' expectations different for racial minority than for European American students? a meta-analysis. *Journal of Educational Psychology, 99*, 253–273.
- Academic Excellence Indicator System. (2008). *Report of student enrollment and academic performance*. Austin, TX: Texas Education Agency.
- Texas Education Agency. (2008). 2008 Adequate yearly progress (ayp) guide for texas public school districts and campuses. (GEO8 602 03) Austin, TX: Texas Education Agency.
- Thernstrom, A. & Thernstrom, S. (2003). No excuses: Closing the racial gap in learning. New York: Simon & Schuster.
- Townsend, B.L. (2002). Testing while black: standards-based school reform and african american learners. *Remedial and Special Education. 23*, 222-230.
- Tyler, K.M., & Boelter, C.M. (2008). Linking black middle school students' perceptions of teachers' expectations to academic engagement and efficacy. *The Negro Educational Review, 59*(1-2), 27-44.
- U.S. Department of Education (1997). National center for education statistics naep mathematics assessment. Washington, DC: Institute of Education Sciences.
- U.S. Department of Education (2000). Twenty-second annual report to congress on the implementation of the individuals with disabilities education act. Washington, DC: U.S. Government Printing Office.
- U. S. Department of Education. (2004). *The condition of education 2004*. Retrieved October 22, 2007, from <http://nces.ed.gov/programs/coe/>
- Walker-Dalhouse, D., & Dalhouse, D.A., (2006). Investigating white preservice teachers'

- beliefs about teaching culturally diverse classrooms. *The Negro Educational Review*, 57(1-2), 69-84.
- Wang, A.H., (2008). A pre-kindergarten achievement gap? Scope and implications. *US-China Education Review*, 5(9), 23-31.
- Whiting, G. W. (2006). Enhancing culturally diverse males scholar identity: Suggestions for educators of gifted students. *Gifted Child Today*, 29(3), 46-50.
- Zirkel, S. (2002). Is there a place for me? Role models and academic identity among white students and students of color. *Teachers College Record*, 104, 357-376.

Appendix A
Texas Education Service Center Region Maps

Figure A1

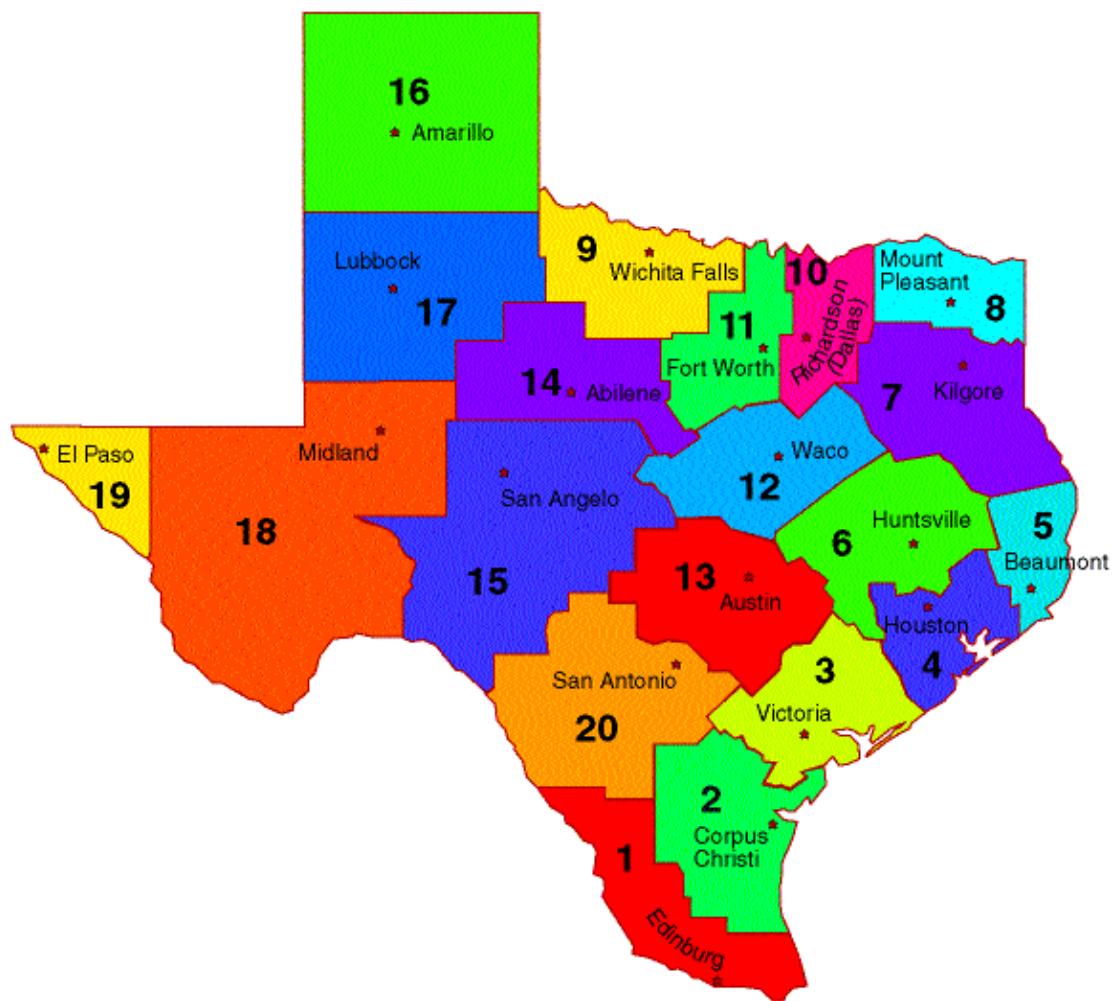
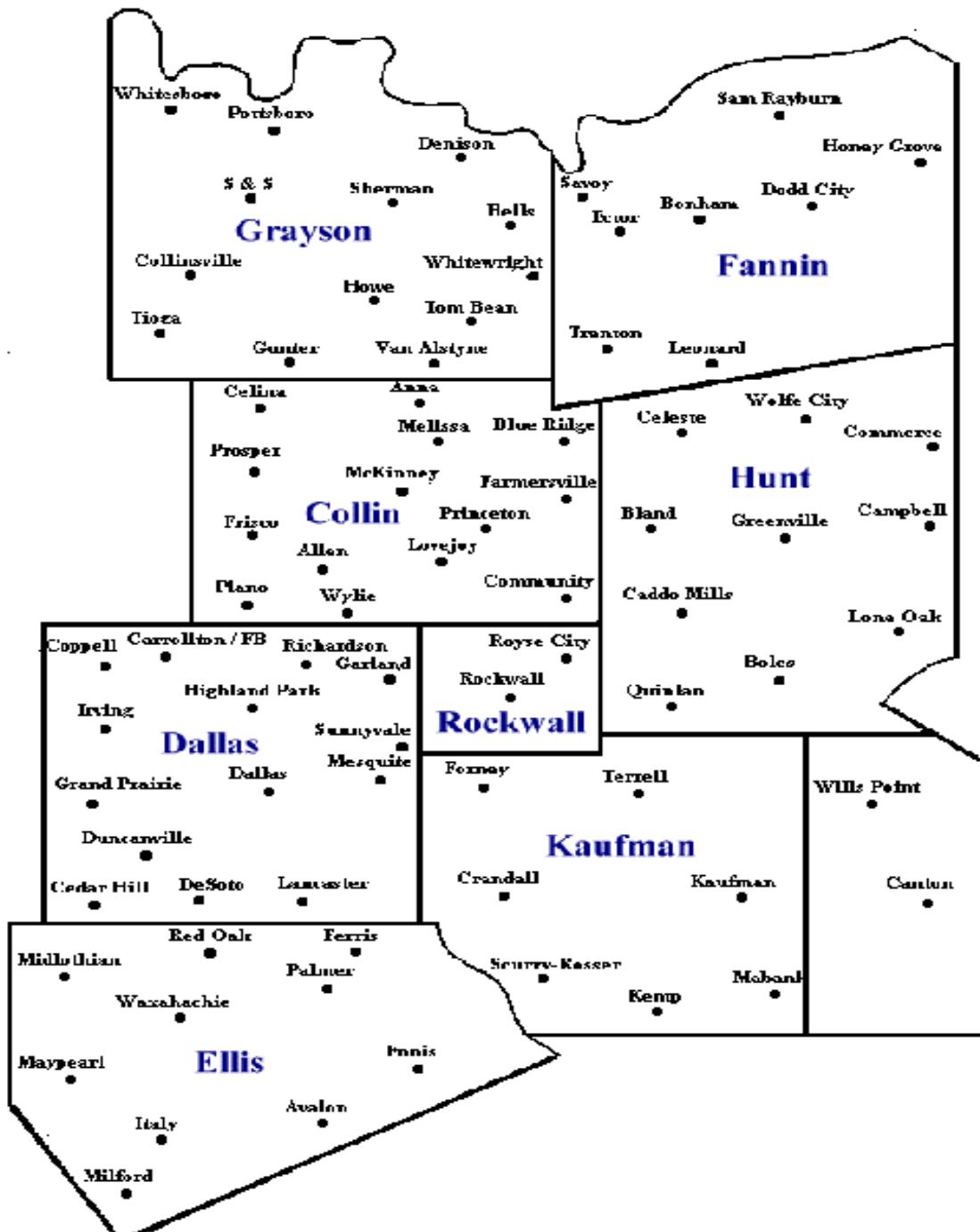


Figure A2



Appendix B

Complete Ethnic Breakdown of Region 10 TAKS Pass Rates

Table B1

2007-2008 Ethnic Breakdown of the Region 10 TAKS Pass Rate for all Tests

Ethnicity	Grade	Pass Rate	Grade	Pass Rate
African-American	3	70%	7	63%
	4	67%	8	49%
	5	58%	9	48%
	6	72%	10	37%
			11	57%
White	3	92%	7	88%
	4	89%	8	83%
	5	87%	9	83%
	6	92%	10	74%
			11	86%

Note: The percentages are from the first administration of the TAKS test.

Table B1 (continued)

2007-2008 Ethnic Breakdown of the Region 10 TAKS Pass Rate for all Tests

Ethnicity	Grade	Pass Rate	Grade	Pass Rate
Hispanic	3	76%	7	67%
	4	71%	8	54%
	5	63%	9	52%
	6	78%	10	42%
			11	63%
Native-American	3	84%	7	82%
	4	79%	8	70%
	5	80%	9	69%
	6	84%	10	67%
			11	78%

Note: The percentages are from the first administration of the TAKS test

Table B1 (continued)

2007-2008 Ethnic Breakdown of the Region 10 TAKS Pass Rate for all Tests

Ethnicity	Grade	Pass Rate	Grade	Pass Rate
Asian/Pacific Islander	3	94%	7	93%
	4	94%	8	89%
	5	92%	9	90%
	6	96%	10	82%
			11	88%

Note: The percentages are from the first administration of the TAKS test

Appendix C

2005-2008 Texas Education Agency School Accountability Ratings

District	2005-2006 Accountability Rating	2006-2007 Accountability Rating	2007-2008 Accountability Rating
Carrollton-Farmers Branch	Recognized	Academically Acceptable	Recognized
Cedar Hill ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Commerce ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Coppell ISD	Recognized	Recognized	Recognized
Desoto ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Duncanville ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Ennis ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Forney ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Frisco ISD	Recognized	Academically Acceptable	Recognized
Garland ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Grand Prairie ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Greenville ISD	Academically Unacceptable Acceptable	Academically Acceptable	Academically Unacceptable Acceptable
Irving ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable

District	2005-2006 Accountability Rating	2006-2007 Accountability Rating	2007-2008 Accountability Rating
Kaufman ISD	Recognized	Academically Acceptable	Recognized
Lancaster ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
McKinney ISD	Recognized	Academically Acceptable	Academically Acceptable
Mesquite ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Plano ISD	Recognized	Academically Acceptable	Academically Acceptable
Red Oak ISD	Recognized	Academically Acceptable	Academically Acceptable
Richardson ISD	Recognized	Recognized	Recognized
Rockwall ISD	Recognized	Academically Acceptable	Academically Acceptable
Sherman ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Terrell ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable
Waxahachie ISD	Academically Acceptable	Academically Acceptable	Academically Acceptable

Appendix D

2008 Sample Snapshot AEIS Report

District Name	CARROLLTON-FARMERS BRANCH ISD
County Number and Name	057 DALLAS
Education Service Center Region	Region 10
1. District Accountability Ratings	Recognized
2. Total Number of Schools	42
----- STUDENTS -----	
3. Total Students	26,340
4. % African American	14
5. % Hispanic	50
6. % White	24
7. % Other	12
8. % Economically Disadvantaged	54.3
9. % LEP	24
10. % Special Education	10
11. % Bilingual/ESL Education	24
12. % Career & Technical Education	18
13. % Gifted & Talented Education	10
14. Attendance Rate (2006-07)	96.1
15. Annual Dropout Rate Gr. 7-8 (2006-07)	0.1
16. Longitudinal Dropout Rate Gr. 9-12 (Class of 2007)	8.0
17. Annual Graduate Count (Class of 2007)	1,460
18. Longitudinal Graduation Rate (Class of 2007)	80.4
----- TAKS -----	
% STUDENTS PASSING-ALL GRADES	
19. All Tests Taken	77
20. Reading/ELA	92
21. Writing	94
22. Mathematics	84
23. Science	79
24. Social Studies	94
25. African American	70
26. Hispanic	69
27. White	89
28. Other	89
29. Economically Disadvantaged	69
30. Exit-Level Cumulative Pass Rate	89
----- COLLEGE ADMISSIONS -----	
(CLASS OF 2007)	
31. Percent Tested	68.9
32. Percent At or Above Criterion	34.7
33. SAT - Mean Total Score	1036
34. ACT - Mean Composite Score	21.2
----- STAFF -----	
35. Total Staff FTE	3,367
36. Total Teacher FTE	1,848

37. % Central Administrative	1
38. % School Administrative	3
39. % Professional Support Staff	10
40. % Teachers	55
41 % Educational Aides	8
42. % Auxiliary Staff	23
43. Average Central Administrative Salary	98,015
44. Average School Administrative Salary	76,202
45. Average Professional Support Staff Salary	58,220
46. Average Teacher Salary	47,940
47. % Minority	31
48. Number of Students Per Total Staff	7.8
49. Number of Students Per Teacher	14.3
----- TEACHERS -----	
50. % With 5 or Fewer Years of Experience	47.3
51. Average Years of Experience	8.9
52. % With Advanced Degrees	24.3
53. Teacher Turnover Rate	19.1
54. % African American	6
55. % Hispanic	10
56. % White	81
57. % Other	3
58. % Regular Education	69
59. % Special Education	11
60. % Compensatory Education	2
61. % Bilingual/ESL Education	11
62. % Career & Technical Education	3
63. % Other Education (Includes G & T)	5
---- TAXES AND ACTUAL REVENUES -----	
64. Taxable Value Per Pupil	529,062
65. Locally Adopted Tax Rate	1.367
66. Total Revenue (2006-07)	274,272,154
67. Total Revenue Per Pupil	10,483
68. % State	15
69. % Local and Other	79
70. % Federal	6
----- FUND BALANCES -----	
71. Fund Balance (End of 2006-07)	60,506,233
72. % Fund Balance (of 2007-08 Budget)	27
----- ACTUAL EXPENDITURES -----	
73. Total Expenditures (2006-07)	300,134,125
74. Total Operating Expenditures (2006-07)	208,352,014
75. Total Operating Expenditures Per Pupil	7,964
76. % Instructional	58
77. % Central Administrative	6
78. % School Leadership	7

79. % Plant Services	11
80. % Other Operating	18
81. Total Instructional Expenditures	120,851,162
82. Total Instructional Expenditures Per Pupil	4,619
83. % Regular Education	62
84. % Special Education	17
85. % Accelerated Education	8
86. % Bilingual/ESL Education	2
87. % Career & Technology Education	3
88. % Gifted & Talented Education	7
89. % Athletics/Related Activities	1
90. % Other Expenditures	0

Appendix E

TAKS Performance Standards 2006-2008

Table E1

2006-2008 Correct Answers Required to Meet Reading TAKS Performance Standards

Grade	2006	2007	2008
3	24/36	23/36	24/36
4	27/40	27/40	28/40
5	29/42	29/42	29/42
6	26/42	27/42	27/42
7	35/48	32/48	33/48
8	34/48	33/48	33/48
9	26/42	28/42	26/42

Note: The number correct/total number of questions (first administration only)

Table E2

2006-2008 Correct Answers Required to Meet Math TAKS Performance Standards

Grade	2006	2007	2008
3	27/40	27/40	27/40
4	28/42	28/42	28/42
5	30/44	30/44	30/44
6	29/46	29/46	29/46
7	28/48	28/48	27/48
8	30/50	30/50	30/50
9	31/52	31/52	31/52
10	33/56	32/56	34/56
11	33/60	33/60	33/60

Note: The number correct/total number of questions (first administration only)

Table E3

2006-2008 Correct Answers Required to Meet Writing TAKS Performance Standards

Grade	2006	2007	2008
4	20/32	20/32	18/32
7	27/44	26/44	26/44

Note: The number correct/total number of questions (first administration only) Students must score at least a 2 on their written compositions.

Table E4

2006-2008 Correct Answers Required to Meet Social Studies TAKS Performance Standards

Grade	2006	2007	2008
8	25/48	25/48	25/48
10	29/50	29/50	29/50
11	27/55	28/55	28/55

Note: The number correct/total number of questions (first administration only)

Table E5

2006-2008 Correct Answers Required to Meet English/Language Arts TAKS Performance Standards

Grade	2006	2007	2008
10	46/73	44/73	44/73
11	43/73	42/73	43/73

Note: The number correct/total number of questions (first administration only) Students must score at least a 2 on their written compositions.

Table E6

2006-2008 Correct Answers Required to Meet Science TAKS Performance Standards

Grade	2006	2007	2008
5	30/40	30/40	30/40
8	27/50	29/50	32/50
10	34/55	35/55	34/55
11	29/55	29/55	30/55

Note: The number correct/total number of questions (first administration only)

Appendix F

TAKS 2006-2008 Item Analysis

Table F1

Reading TAKS Questions per Objective (2006-2008)

Objective	Grade Level					
	3	4	5	6	7	8
1. Basic Understanding	15	15	13	13	12	12
2. Applying Knowledge of Literary Elements	7	8	8	8	10	10
3. Using Strategies to Analyze	6	7	8	8	10	10
4. Applying Critical-Thinking Skills	8	10	13	13	16	16

Table F2

Reading TAKS Questions per Objective (2006-2008)

Objective	Grade Level	
	9	
1. Basic Understanding		9
2. Literary Elements and Techniques		13
3. Analysis and Evaluation		14

Table F3

English Language Arts TAKS Questions per Objective (2006-2008)

Objective	Grade Level	
	10	11
1. Basic Understanding	8	8
2. Literary Elements and Techniques	9	9
3. Analysis and Evaluation	14	14
4. Written Composition Prompt	1 Writing Prompt	1 Writing Prompt
5. Revising and Evaluation	20	20

Table F4

Mathematics TAKS Questions per Objective (2006-2008)

Objective	Grade Level					
	3	4	5	6	7	8
1. Numbers, Operations, and Quantitative Reasoning	10	11	11	10	10	10
2. Patterns, Relationships, and Algebraic Reasoning	6	7	7	9	10	10
3. Geometry and Spatial Reasoning	6	6	7	7	7	7
4. Concepts and Uses of Measurement	6	6	7	5	5	5
5. Probability and Statistics	4	4	4	6	7	8
6. Mathematical Processes and Tools	8	8	8	9	9	10

Table F5

Mathematics TAKS Questions per Objective (2006-2008)

Objective	Grade Level		
	9	10	11
1. Functional Relationships	5	5	5
2. Properties and Attributes of Functions	5	5	5
3. Linear Functions	5	5	5
4. Linear Equations and Inequalities	5	5	5
5. Nonlinear Functions and Inequalities	4	5	5
6. Geometric Relationships and Spatial Reasoning	4	5	7
7. Two and Three Dimensional Representations	4	5	7
8. Measurement and Similarity	6	7	7

Table F5 (continued)

Mathematics TAKS Questions per Objective (2006-2008)

Objective	Grade Level		
	9	10	11
9. Percents, Proportions, Probability Statistics	5	5	5
10. Mathematical Processes and Tools	9	9	9

Table F6

Social Studies TAKS Questions per Objective (2006-2008)

Objective	Grade Level		
	8	10	11
1. Issues and Events in US History	13	7	13
2. Geographic Influences on History	6	12	9
3. Economic and Social Influences on History	9	7	13
4. Political Influences on History	12	12	9
5. Critical-Thinking Skills	8	12	11

Table F7

Science TAKS Questions per Objective (2006-2008)

Objective	Grade Level
	5
1. Nature of Science	13
2. Life Sciences	9
3. Physical Sciences	9
4. Earth Sciences	9
Objective	Grade Level
	8
1. Nature of Science	14
2. Living Systems and the Environment	12
3. Structures and properties of Matter	6
4. Motion, Force, and Energy	6
5. Earth and Space Systems	12

Table F8

Science TAKS Questions per Objective (2006-2008)

Objective	Grade Level	
	10	11
1. Nature of Science	17	17
2. Organizations of Living Systems	11	8
3. Interdependence of Organisms and the Environment	11	8
4. Structures and Properties of Matter	8	11
5. Motion, Force, and Energy	8	11

Appendix G

African-American Student, Economically Disadvantaged, and At Risk Percentages

Table G1

Demographic Data of Schools with the Highest and Lowest Percentage of African-American Teachers

Schools	% AA Teachers	% AA Students	% Economic Disadvantaged	% At Risk Students
Middle School #32	85.3%	79.8%	77.5%	51.6%
Middle School #8	57.6%	51.1%	69.5%	38.5%
Middle School #6	51.8%	82.6%	50.2%	52.0%
Middle School #10	46.4%	42.6%	57.4%	32.9%
Middle School #49	43.7%	28.0%	61.5%	58.9%
Middle School Averages		56.8%	63.2%	46.7%
Middle School #2	0%	19.8%	52.7%	36.3%
Middle School #45	1.7%	40.5%	57.1%	51.0%
Middle School #48	2.0%	8.1%	21.6%	21.0%
Middle School #28	2.2%	9.9%	64.0%	57.3%
Middle School #29	2.5%	5.2%	78.1%	62.9%
Middle School Averages		16.7%	54.7%	45.7%

Note. 10% of 2008 Demographic data

Table G2

Demographic Data of Schools with the Highest and Lowest Percentage of African-American Teachers

Schools	% AA Teachers	% AA Students	% Economic Disadvantaged	% At Risk Students
High School #27	53.8%	85.0%	61.5%	60.0%
High School #7	28.2%	82.3%	49.3%	66.3%
High School #8	23.9%	80.9%	49.3%	60.2%
High School #9	20.4%	50.7%	50.9%	62.9%
High School #5	19.3%	68.8%	37.2%	61.5%
High School Averages		73.5%	49.6%	62.1%
High School #6	0%	4.7%	6.3%	21.3%
High School #11	0%	12.3%	16.3%	42.0%
High School #45	1.3%	6.6%	12.0%	26.3%
High School #3	1.9%	16.1%	39.9%	6.5%
High School #39	1.9%	9.8%	17.1%	6.2%
High School Averages		9.9%	18.3%	20.4%

Note. 10% of 2008 Demographic data

Appendix H

Raw Data

Table H1

African-American Middle School Passing Percentage for All TAKS Subjects 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #1	21.5%	57%
Middle School #2	0.0%	58%
Middle School #3	42.0%	32%
Middle School #4	17.6%	36%
Middle School #5	7.2%	36%
Middle School #6	51.8%	39%
Middle School #7	25.3%	39%
Middle School #8	57.6%	45%
Middle School #9	43.7%	42%
Middle School #10	46.4%	50%
Middle School #11	3.5%	33%
Middle School #12	3.1%	56%
Middle School #13	10.9%	51%
Middle School #14	13.0%	47%
Middle School #15	29.3%	43%
Middle School #16	15.1%	46%
Middle School #17	10.9%	43%
Middle School #18	20.2%	57%
Middle School #19	9.60%	58%
Middle School #20	11.3%	49%
Middle School #21	5.40%	45%
Middle School #22	15.7%	44%
Middle School #23	6.50%	26%
Middle School #24	10.6%	20%
Middle School #25	4.30%	44%
Middle School #26	6.10%	50%
Middle School #27	22.3%	48%
Middle School #28	2.20%	63%
Middle School #29	2.50%	33%
Middle School #30	3.20%	41%
Middle School #31	5.30%	48%
Middle School #32	85.3%	22%
Middle School #33	3.50%	65%
Middle School #34	7.80%	41%
Middle School #35	9.20%	51%

Table H1 (continued)

African-American Middle School Passing Percentage for All TAKS Subjects 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #36	5.1%	38%
Middle School #37	8.3%	43%
Middle School #38	23.6%	31%
Middle School #39	7.20%	43%
Middle School #40	15.7%	55%
Middle School #41	4.30%	63%
Middle School #42	10.8%	51%
Middle School #43	13.5%	33%
Middle School #44	13.6%	35%
Middle School #45	1.70%	40%
Middle School #46	7.20%	54%
Middle School #47	12.5%	59%
Middle School #48	2.0%	54%
Middle School #49	43.7%	28%
Middle School #50	28.9%	62%

Table H2

African-American Middle School Passing Percentage for All TAKS Subjects 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #1	16.4%	62%
Middle School #2	3.10%	61%
Middle School #3	43.8%	41%
Middle School #4	33.4%	46%
Middle School #5	10.8%	56%
Middle School #6	72.1%	45%
Middle School #7	30.0%	45%
Middle School #8	62.6%	47%
Middle School #9	42.2%	51%
Middle School #10	47.7%	62%
Middle School #11	6.90%	29%
Middle School #12	1.90%	62%

Table H2 (continued)

African-American Middle School Passing Percentage for All TAKS Subjects 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #13	11.7%	51%
Middle School #14	11.6%	50%
Middle School #15	43.4%	53%
Middle School #16	10.6%	49%
Middle School #17	10.0%	38%
Middle School #18	24.7%	61%
Middle School #19	10.5%	68%
Middle School #20	18.3%	60%
Middle School #21	6.8%	53%
Middle School #22	17.3%	43%
Middle School #23	12.7%	38%
Middle School #24	18.6%	35%
Middle School #25	4.2%	43%
Middle School #26	7.9%	56%
Middle School #27	20.9%	57%
Middle School #28	5.7%	68%
Middle School #29	5.1%	38%
Middle School #30	6.2%	50%
Middle School #31	5.3%	60%
Middle School #32	82.3%	36%
Middle School #33	3.1%	65%
Middle School #34	10.8%	46%
Middle School #35	7.7%	60%
Middle School #36	8.7%	49%
Middle School #37	5.2%	63%
Middle School #38	21.8%	38%
Middle School #39	9.1%	61%
Middle School #40	16.6%	61%
Middle School #41	4.0%	61%
Middle School #42	10.1%	60%

Table H2 (continued)

African-American Middle School Passing Percentage for All TAKS Subjects 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #43	21.6%	47%
Middle School #44	17.1%	54%
Middle School #45	2.90%	50%
Middle School #46	5.40%	63%
Middle School #47	10.9%	61%
Middle School #48	1.80%	59%
Middle School #49	20.2%	38%
Middle School #50	24.8%	73%

Table H3

African-American Middle School Passing Percentage for All TAKS Subjects 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #1	12.3%	72%
Middle School #2	6.30%	72%
Middle School #3	64.1%	59%
Middle School #4	32.4%	54%
Middle School #5	4.00%	48%
Middle School #6	70.8%	50%
Middle School #7	30.8%	50%
Middle School #8	60.9%	53%
Middle School #9	45.4%	60%
Middle School #10	54.3%	70%
Middle School #11	7.10%	48%
Middle School #12	2.30%	82%
Middle School #13	10.1%	66%
Middle School #14	14.1%	66%
Middle School #15	38.8%	51%
Middle School #16	13.3%	56%
Middle School #17	16.2%	59%

Table H3 (continued)

African-American Middle School Passing Percentage for All TAKS Subjects 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #18	28.0%	68%
Middle School #19	9.5%	71%
Middle School #20	20.8%	50%
Middle School #21	11.3%	53%
Middle School #22	17.3%	41%
Middle School #23	20.9%	36%
Middle School #24	16.6%	25%
Middle School #25	2.8%	50%
Middle School #26	7.7%	61%
Middle School #27	30.0%	61%
Middle School #28	8.2%	75%
Middle School #29	5.8%	56%
Middle School #30	7.1%	57%
Middle School #31	5.3%	64%
Middle School #32	81.9%	39%
Middle School #33	4.7%	69%
Middle School #34	8.3%	69%
Middle School #35	11.4%	65%
Middle School #36	6.5%	51%
Middle School #37	8.1%	52%
Middle School #38	22.5%	50%
Middle School #39	17.7%	61%
Middle School #40	13.8%	58%
Middle School #41	3.8%	81%
Middle School #42	5.9%	78%
Middle School #43	28.5%	63%
Middle School #44	22.2%	66%
Middle School #45	7.50%	55%
Middle School #46	8.6%	83%
Middle School #47	8.6%	82%
Middle School #48	1.6%	67%
Middle School #49	20.2%	46%
Middle School #50	18.1%	49%

Table H4

African-American High School Passing Percentage for All TAKS Subjects 2005-2006

Schools	African-American Teacher %	Passing %
High School #1	5.0%	56%
High School #2	16.2%	50%
High School #3	1.9%	47%
High School #4	5.6%	56%
High School #5	19.3%	31%
High School #6	0.0%	65%
High School #7	28.2%	49%
High School #8	23.9%	37%
High School #9	20.4%	36%
High School #10	4.60%	33%
High School #11	0.0%	40%
High School #12	2.60%	58%
High School #13	3.10%	52%
High School #14	9.70%	52%
High School #15	11.4%	40%
High School #16	7.10%	44%
High School #17	8.70%	37%
High School #18	6.80%	51%
High School #19	9.50%	36%
High School #20	9.50%	41%
High School #21	12.8%	25%
High School #22	11.2%	41%
High School #23	13.4%	26%
High School #24	6.30%	32%
High School #25	5.00%	43%
High School #26	7.30%	43%
High School #27	53.8%	29%
High School #28	6.20%	60%
High School #29	8.20%	41%
High School #30	12.7%	36%
High School #31	8.50%	36%
High School #32	5.70%	44%
High School #33	11.2%	36%
High School #34	15.4%	61%
High School #35	3.40%	74%

Table H4 (continued)

African-American High School Passing Percentage for All TAKS Subjects 2005-2006

Schools	African-American Teacher %	Passing %
High School #36	5.50%	59%
High School #37	2.70%	73%
High School #40	1.9%	58%
High School #41	4.1%	53%
High School #42	3.2%	55%
High School #43	9.2%	41%
High School #44	10.3%	67%
High School #45	1.3%	60%
High School #46	4.0%	47%
High School #47	2.1%	45%
High School #48	10.3%	32%
High School #49	4.1%	34%
High School #50	2.9%	35%

Table H5

African-American High School Passing Percentage for All TAKS Subjects 2006-2007

Schools	African-American Teacher %	Passing %
High School #1	5.60%	58%
High School #2	13.6%	53%
High School #3	2.40%	52%
High School #4	6.50%	63%
High School #5	28.4%	41%
High School #6	0.50%	69%
High School #7	30.8%	49%
High School #8	32.6%	30%
High School #9	23.4%	39%
High School #10	4.60%	34%
High School #11	0.80%	46%
High School #12	2.90%	72%
High School #13	4.10%	59%

Table H5 (continued)

African-American High School Passing Percentage for All TAKS Subjects 2006-2007

Schools	African-American Teacher %	Passing %
High School #14	9.80%	57%
High School #15	11.8%	42%
High School #16	6.60%	48%
High School #17	10.0%	36%
High School #18	6.20%	57%
High School #19	10.3%	32%
High School #20	7.60%	46%
High School #21	15.3%	29%
High School #22	13.3%	47%
High School #23	8.20%	28%
High School #24	10.7%	43%
High School #25	6.70%	40%
High School #26	8.70%	34%
High School #27	56.3%	28%
High School #28	3.30%	56%
High School #29	7.20%	45%
High School #30	11.1%	43%
High School #31	12.6%	43%
High School #32	4.90%	53%
High School #33	11.5%	45%
High School #34	6.60%	57%
High School #35	2.60%	75%
High School #36	5.20%	60%
High School #37	1.40%	71%
High School #38	5.70%	56%
High School #39	3.10%	67%
High School #40	3.60%	51%
High School #41	5.90%	55%
High School #42	4.20%	51%
High School #43	9.00%	47%
High School #44	9.30%	65%
High School #45	1.50%	55%
High School #46	3.50%	58%
High School #47	0.90%	47%
High School #48	14.6%	34%
High School #49	3.90%	30%
High School #50	0.00%	70%

Table H6

African-American High School Passing Percentage for All TAKS Subjects 2007-2008

Schools	African-American Teacher %	Passing %
High School #1	6.2%	56%
High School #2	11.3%	48%
High School #3	2.50%	56%
High School #4	7.50%	58%
High School #5	27.8%	47%
High School #6	1.50%	72%
High School #7	40.1%	46%
High School #8	35.1%	37%
High School #9	24.2%	42%
High School #10	7.70%	45%
High School #11	1.00%	41%
High School #12	1.80%	65%
High School #13	4.80%	68%
High School #14	8.90%	62%
High School #15	16.6%	45%
High School #16	8.30%	59%
High School #17	8.30%	53%
High School #18	6.80%	67%
High School #19	10.8%	40%
High School #20	7.6%	63%
High School #21	13.2%	42%
High School #22	11.7%	61%
High School #23	9.4%	33%
High School #24	8.1%	53%
High School #25	8.6%	44%
High School #26	11.1%	41%
High School #27	65.1%	36%
High School #28	7.1%	58%
High School #29	9.4%	48%
High School #30	11.0%	39%
High School #31	14.6%	37%
High School #32	6.0%	55%
High School #33	13.6%	43%
High School #34	7.4%	59%
High School #43	13.1%	53%

Table H6 (continued)

African-American High School Passing Percentage for All TAKS Subjects 2007-2008

Schools	African-American Teacher %	Passing %
High School #43	13.1%	53%
High School #44	10.5%	70%
High School #45	1.3%	55%
High School #46	2.7%	47%
High School #47	0.9%	44%
High School #48	13.6%	33%
High School #49	3.9%	47%
High School #50	0.0%	34%

Table H7

African-American Passing Percentage for TAKS Reading/Language Arts 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #1	21.50	86%
Middle School #2	0.0%	86%
Middle School #3	42.0%	70%
Middle School #4	17.6%	75%
Middle School #5	7.2%	73%
Middle School #6	51.8%	76%
Middle School #7	25.3%	76%
Middle School #8	57.6%	79%
Middle School #9	43.7%	77%
Middle School #10	46.4%	87%
Middle School #11	3.5%	76%
Middle School #12	3.1%	90%
Middle School #13	10.9%	83%
Middle School #14	13.0%	82%
Middle School #15	29.3%	78%
Middle School #16	15.1%	78%
Middle School #17	10.9%	77%

Table H7 (continued)

African-American Passing Percentage for TAKS Reading/Language Arts 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #18	20.2%	79%
Middle School #19	9.6%	88%
Middle School #20	11.3%	80%
Middle School #21	5.4%	85%
Middle School #22	15.7%	83%
Middle School #23	6.5%	63%
Middle School #24	10.6%	65%
Middle School #25	4.3%	80%
Middle School #26	6.1%	81%
Middle School #27	22.3%	82%
Middle School #28	2.2%	87%
Middle School #29	2.5%	80%
Middle School #30	3.2%	75%
Middle School #31	5.3%	72%
Middle School #32	85.3%	60%
Middle School #33	3.5%	88%
Middle School #34	7.8%	79%
Middle School #35	9.2%	85%
Middle School #36	5.1%	74%
Middle School #37	8.3%	79%
Middle School #38	23.6%	80%
Middle School #39	7.2%	83%
Middle School #40	15.7%	85%
Middle School #41	4.3%	87%
Middle School #42	10.8%	84%
Middle School #43	13.5%	66%
Middle School #44	13.6%	70%
Middle School #45	1.7%	73%
Middle School #46	7.2%	82%
Middle School #47	12.5%	80%
Middle School #48	2.0%	84%
Middle School #49	43.7%	67%
Middle School #50	28.9%	81%

Table H8

African-American Passing Percentage for TAKS Reading/Language Arts 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #1	16.4%	95%
Middle School #2	3.1%	83%
Middle School #3	43.8%	84%
Middle School #4	33.4%	79%
Middle School #5	10.8%	78%
Middle School #6	72.1%	85%
Middle School #7	30.0%	83%
Middle School #8	62.6%	86%
Middle School #9	42.2%	88%
Middle School #10	47.7%	93%
Middle School #11	6.9%	80%
Middle School #12	1.9%	94%
Middle School #13	11.7%	91%
Middle School #14	11.6%	88%
Middle School #15	43.4%	87%
Middle School #16	10.6%	85%
Middle School #17	10.0%	88%
Middle School #18	24.7%	90%
Middle School #19	10.5%	92%
Middle School #20	18.3%	82%
Middle School #21	6.8%	87%
Middle School #22	17.3%	85%
Middle School #23	12.7%	77%
Middle School #24	18.6%	69%
Middle School #25	4.2%	78%
Middle School #26	7.9%	80%
Middle School #27	20.9%	89%
Middle School #28	5.7%	89%
Middle School #29	5.1%	76%
Middle School #30	6.2%	77%
Middle School #31	5.3%	76%
Middle School #32	82.3%	82%
Middle School #33	3.1%	90%
Middle School #34	10.8%	89%
Middle School #35	7.7%	91%
Middle School #36	8.7%	88%
Middle School #37	5.20%	90%

Table H8 (continued)

African-American Passing Percentage for TAKS Reading/Language Arts 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #38	21.8%	84%
Middle School #39	9.1%	90%
Middle School #40	16.6%	90%
Middle School #41	4.0%	89%
Middle School #42	10.1%	89%
Middle School #43	21.6%	81%
Middle School #44	17.1%	88%
Middle School #45	2.9%	77%
Middle School #46	5.4%	84%
Middle School #47	10.9%	88%
Middle School #48	1.8%	88%
Middle School #49	20.2%	82%
Middle School #50	24.8%	94%

Table H9

African-American Passing Percentage for TAKS Reading/Language Arts 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #1	12.3%	94%
Middle School #2	6.3%	92%
Middle School #3	64.1%	94%
Middle School #4	32.4%	87%
Middle School #5	4.0%	80%
Middle School #6	70.8	86%
Middle School #7	30.8%	85%
Middle School #8	60.9%	84%
Middle School #9	45.4%	89%
Middle School #10	54.3%	94%
Middle School #11	7.1%	83%
Middle School #12	2.3%	93%
Middle School #13	10.1%	91%
Middle School #14	14.1%	90%
Middle School #15	38.8%	82%
Middle School #16	13.3%	83%

Table H9

African-American Passing Percentage for TAKS Reading/Language Arts 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #17	16.2%	82%
Middle School #18	28%	91%
Middle School #19	9.5%	95%
Middle School #20	20.8%	85%
Middle School #21	11.3%	87%
Middle School #22	17.3%	74%
Middle School #23	20.9%	64%
Middle School #24	16.6%	72%
Middle School #25	2.8%	85%
Middle School #26	7.7%	88%
Middle School #27	30.0%	85%
Middle School #28	8.2%	92%
Middle School #29	5.8%	80%
Middle School #30	7.1%	88%
Middle School #31	5.3%	82%
Middle School #32	81.9%	81%
Middle School #33	4.7%	90%
Middle School #34	8.3%	95%
Middle School #35	11.4%	93%
Middle School #36	6.5%	80%
Middle School #37	8.1%	86%
Middle School #38	22.5%	91%
Middle School #39	17.7%	89%
Middle School #40	13.8%	86%
Middle School #41	3.8%	94%
Middle School #42	5.9%	94%
Middle School #43	28.5%	89%
Middle School #44	22.2%	87%
Middle School #45	7.5%	90%
Middle School #46	8.6%	94%
Middle School #47	8.6%	96%
Middle School #48	1.6%	93%
Middle School #49	20.2%	75%
Middle School #50	18.1%	91%

Table H10

African-American Passing Percentage for TAKS Reading/Language Arts 2005-2006

Schools	African-American Teacher %	Passing %
High School #1	5.0%	97%
High School #2	16.2%	90%
High School #3	1.9%	87%
High School #4	5.6%	85%
High School #5	19.3%	81%
High School #6	0.0%	95%
High School #7	28.2%	89%
High School #8	23.9%	87%
High School #9	20.4%	86%
High School #10	4.6%	83%
High School #11	0.0%	84%
High School #12	2.6%	93%
High School #13	3.1%	90%
High School #14	9.7%	85%
High School #15	11.4%	78%
High School #16	7.1%	84%
High School #17	8.7%	80%
High School #18	6.8%	90%
High School #19	9.5%	77%
High School #20	9.5%	82%
High School #21	12.8%	74%
High School #22	11.2%	84%
High School #23	13.4%	79%
High School #24	6.3%	91%
High School #25	5.0%	89%
High School #26	7.3%	88%
High School #27	53.8%	80%
High School #28	6.2%	94%
High School #29	8.2%	89%
High School #30	12.7%	87%
High School #31	8.5%	82%
High School #32	5.7%	90%
High School #33	11.2%	88%
High School #34	15.4%	89%
High School #35	3.4%	97%
High School #36	5.5%	89%

Table H10 (continued)

African-American Passing Percentage for TAKS Reading/Language Arts 2005-2006

Schools	African-American Teacher %	Passing %
High School #37	2.70%	98%
High School #38	5.10%	89%
High School #39	3.20%	94%
High School #40	1.90%	90%
High School #41	4.10%	93%
High School #42	3.20%	93%
High School #43	9.20%	84%
High School #44	10.30%	93%
High School #45	1.30%	91%
High School #46	4.00%	85%
High School #47	2.10%	90%
High School #48	10.30%	89%
High School #49	4.10%	93%
High School #50	2.90%	84%

Table H11

African-American Passing Percentage for TAKS Reading/Language Arts 2006-2007

Schools	African-American Teacher %	Passing %
High School #1	5.6%	92%
High School #2	13.6%	92%
High School #3	2.40	89%
High School #4	6.5%	89%
High School #5	28.4%	85%
High School #6	0.5%	92%
High School #7	30.8%	82%
High School #8	32.60	79%
High School #9	23.4%	85%
High School #10	4.6%	82%
High School #11	0.8%	89%
High School #12	2.9%	96%
High School #13	4.1%	86%
High School #14	9.8%	86%
High School #16	6.6%	88%

Table H11 (continued)

African-American Passing Percentage for TAKS Reading/Language Arts 2006-2007

Schools	African-American Teacher %	Passing %
High School #17	10.0%	82%
High School #18	6.20	94%
High School #19	10.3%	74%
High School #20	7.60	89%
High School #21	15.3%	74%
High School #22	13.3%	81%
High School #23	8.2%	77%
High School #24	10.7%	89%
High School #25	6.7%	80%
High School #26	8.7%	86%
High School #27	56.3%	76%
High School #28	3.3%	93%
High School #29	7.2%	89%
High School #30	11.1%	87%
High School #31	12.6%	83%
High School #32	4.9%	91%
High School #33	11.5%	87%
High School #34	6.6%	88%
High School #35	2.6%	93%
High School #36	5.2%	88%
High School #37	1.4%	92%
High School #38	5.7%	85%
High School #39	3.1%	97%
High School #40	3.6%	82%
High School #41	5.9%	93%
High School #42	4.2%	90%
High School #43	9.0%	87%
High School #44	9.3%	95%
High School #45	1.5%	84%
High School #46	3.5%	93%
High School #47	0.9%	89%
High School #48	14.6%	86%
High School #49	3.9%	87%
High School #50	0.0%	95%

Table H12

African-American Passing Percentage for TAKS Reading/Language Arts 2007-2008

Schools	African-American Teacher %	Passing %
High School #1	6.2%	87%
High School #2	11.3%	85%
High School #3	2.5%	86%
High School #4	7.5%	82%
High School #5	27.8%	85%
High School #6	1.5%	91%
High School #7	40.1%	80%
High School #8	35.1%	82%
High School #9	24.2%	82%
High School #10	7.7%	83%
High School #11	1.0%	86%
High School #12	1.8%	95%
High School #13	4.8%	92%
High School #14	8.9%	86%
High School #15	16.6%	78%
High School #16	8.3%	87%
High School #17	8.3%	85%
High School #18	6.8%	92%
High School #19	10.8%	82%
High School #20	7.6%	92%
High School #21	13.2%	76%
High School #22	11.7%	91%
High School #23	9.4%	74%
High School #24	8.1%	90%
High School #25	8.6%	85%
High School #26	11.1%	89%
High School #27	65.1%	75%
High School #28	7.1%	89%
High School #29	9.4%	87%
High School #30	11.0%	83%
High School #31	14.6	80%
High School #32	6.0%	93%
High School #33	13.6%	88%
High School #34	7.4%	91%
High School #35	3.5%	92%
High School #36	5.8%	89%
High School #37	1.8%	95%

Table H12 (continued)

African-American Passing Percentage for TAKS Reading/Language Arts 2007-2008

Schools	African-American Teacher %	Passing %
High School #38	4.7%	93%
High School #39	3.1%	92%
High School #40	9.1%	89%
High School #41	5.7%	86%
High School #42	2.0%	86%
High School #43	13.1%	87%
High School #44	10.5%	93%
High School #45	1.3%	86%
High School #46	2.7%	88%
High School #47	0.9%	78%
High School #48	13.6%	77%
High School #49	3.9%	92%
High School #50	0.0%	71%

Table H13

Middle School Passing Percentage for TAKS Math 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #1	21.5%	64%
Middle School #2	0.0%	68%
Middle School #3	42.0%	48%
Middle School #4	17.6%	54%
Middle School #5	7.2%	50%
Middle School #6	51.8%	54%
Middle School #7	25.3%	52%
Middle School #8	57.6%	63%
Middle School #9	43.7%	64%
Middle School #10	46.4%	64%
Middle School #11	3.5%	52%
Middle School #12	3.1%	84%
Middle School #13	10.9%	66%
Middle School #14	13.0%	57%
Middle School #15	29.3%	56%
Middle School #16	15.1%	56%

Table H13 (continued)

Middle School Passing Percentage for TAKS Math 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #17	10.9%	55%
Middle School #18	20.2%	64%
Middle School #19	9.6%	65%
Middle School #20	11.3%	60%
Middle School #21	5.4%	55%
Middle School #22	15.7%	63%
Middle School #23	6.5%	29%
Middle School #24	10.6%	34%
Middle School #25	4.3%	50%
Middle School #26	6.1%	57%
Middle School #27	22.3%	53%
Middle School #28	2.2%	69%
Middle School #29	2.5%	50%
Middle School #30	3.2%	46%
Middle School #31	5.3%	67%
Middle School #32	85.3%	35%
Middle School #33	3.5%	81%
Middle School #34	7.8%	55%
Middle School #35	9.2%	77%
Middle School #36	5.1%	54%
Middle School #37	8.3%	53%
Middle School #38	23.6%	52%
Middle School #39	7.2%	62%
Middle School #40	15.7%	67%
Middle School #41	4.3%	79%
Middle School #42	10.8%	66%
Middle School #43	13.5%	45%
Middle School #44	13.6%	52%
Middle School #45	1.7%	57%
Middle School #46	7.2%	74%
Middle School #47	12.5%	74%
Middle School #48	2.0%	69%
Middle School #49	43.7%	41%
Middle School #50	28.9%	68%

Table H14 (continued)

Middle School Passing Percentage for TAKS Math 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #1	16.4%	74%
Middle School #2	3.1%	71%
Middle School #3	43.8%	53%
Middle School #4	33.4%	57%
Middle School #5	10.8%	65%
Middle School #6	72.1%	61%
Middle School #7	30.0%	56%
Middle School #8	62.6%	67%
Middle School #9	42.2%	78%
Middle School #10	47.7%	72%
Middle School #11	6.9%	71%
Middle School #12	1.9%	75%
Middle School #13	11.7%	65%
Middle School #14	11.6%	61%
Middle School #15	43.4%	65%
Middle School #16	10.6%	63%
Middle School #17	10.0%	53%
Middle School #18	24.7%	76%
Middle School #19	10.5%	75%
Middle School #20	18.3%	70%
Middle School #21	6.8%	62%
Middle School #22	17.3%	53%
Middle School #23	12.7%	54%
Middle School #24	18.6%	53%
Middle School #25	4.2%	48%
Middle School #26	7.9%	64%
Middle School #27	20.9%	63%
Middle School #28	5.7%	77%
Middle School #29	5.1%	45%
Middle School #30	6.2%	61%
Middle School #31	5.3%	70%
Middle School #32	82.3%	46%
Middle School #33	3.1%	76%
Middle School #34	10.8%	60%
Middle School #35	7.7%	80%
Middle School #36	8.7%	60%
Middle School #37	5.2%	76%

Table H14 (continued)

Middle School Passing Percentage for TAKS Math 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #38	21.8%	56%
Middle School #39	9.1%	78%
Middle School #40	16.6%	66%
Middle School #41	4.0%	76%
Middle School #42	10.1%	77%
Middle School #43	21.6%	69%
Middle School #44	17.1%	68%
Middle School #45	2.9%	68%
Middle School #46	5.4%	78%
Middle School #47	10.9%	79%
Middle School #48	1.8%	71%
Middle School #49	20.2%	52%
Middle School #50	24.8%	76%

Table H15

Middle School Passing Percentage for TAKS Math 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #1	12.3%	79%
Middle School #2	6.3%	77%
Middle School #3	64.1%	74%
Middle School #4	32.4%	69%
Middle School #5	4.0%	64%
Middle School #6	70.8%	59%
Middle School #7	30.8%	58%
Middle School #8	60.9%	73%
Middle School #9	45.4%	72%
Middle School #10	54.3%	83%
Middle School #11	7.1%	71%
Middle School #12	2.3%	87%
Middle School #13	10.1%	72%
Middle School #14	14.1%	71%
Middle School #15	38.8%	58%
Middle School #16	13.3%	66%

Table H15 (continued)

Middle School Passing Percentage for TAKS Math 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #17	16.2%	69%
Middle School #18	28.0%	74%
Middle School #19	9.5%	78%
Middle School #20	20.8%	61%
Middle School #21	11.3%	64%
Middle School #22	17.3%	48%
Middle School #23	20.9%	48%
Middle School #24	16.6%	53%
Middle School #25	2.8%	59%
Middle School #26	7.7%	69%
Middle School #27	30.0%	67%
Middle School #28	8.2%	82%
Middle School #29	5.8%	65%
Middle School #30	7.1%	70%
Middle School #31	5.3%	76%
Middle School #32	81.9%	48%
Middle School #33	4.7%	73%
Middle School #34	8.3%	81%
Middle School #35	11.4%	83%
Middle School #36	6.5%	67%
Middle School #37	8.1%	69%
Middle School #38	22.5%	61%
Middle School #39	17.7%	70%
Middle School #40	13.8%	66%
Middle School #41	3.8%	90%
Middle School #42	5.9%	85%
Middle School #43	28.5%	75%
Middle School #44	22.2%	78%
Middle School #45	7.5%	69%
Middle School #46	8.6%	88%
Middle School #47	8.6%	87%
Middle School #48	1.6%	83%
Middle School #49	20.2%	59%
Middle School #50	18.1%	81%

Table H16

High School Passing Percentage for TAKS Math 2005-2006

Schools	African-American Teacher %	Passing %
High School #1	5.00%	60%
High School #2	16.2%	61%
High School #3	1.9%	53%
High School #4	5.6%	67%
High School #5	19.3%	44%
High School #6	0.0%	66%
High School #7	28.2%	49%
High School #8	23.9%	51%
High School #9	20.4%	43%
High School #10	4.60	41%
High School #11	0.0%	56%
High School #12	2.6%	63%
High School #13	3.1%	58%
High School #14	9.7%	60%
High School #15	11.4%	48%
High School #16	7.1%	49%
High School #17	8.7%	46%
High School #18	6.8%	64%
High School #19	9.5%	48%
High School #20	9.5%	53%
High School #21	12.8%	34%
High School #22	11.2%	54%
High School #23	13.40%	34%
High School #24	6.3%	36%
High School #25	5.0%	49%
High School #26	7.3%	45%
High School #27	53.8%	42%
High School #28	6.2%	73%
High School #29	8.2%	49%
High School #30	12.7%	45%
High School #31	8.5%	45%
High School #32	5.7%	54%
High School #33	11.2%	45%
High School #34	15.4%	67%
High School #35	3.4%	81%
High School #36	5.5%	69%
High School #37	2.7%	77%

Table H16 (continued)

High School Passing Percentage for TAKS Math 2005-2006

Schools	African-American Teacher %	Passing %
High School #38	5.1%	57%
High School #39	3.2%	54%
High School #40	1.9%	65%
High School #41	4.1%	57%
High School #42	3.2%	63%
High School #43	9.2%	53%
High School #44	10.3%	75%
High School #45	1.3%	78%
High School #46	4.0%	56%
High School #47	2.1%	57%
High School #48	10.3%	40%
High School #49	4.1%	40%
High School #50	2.9%	34%

Table H17

High School Passing Percentage for TAKS Math 2006-2007

Schools	African-American Teacher %	Passing %
High School #1	5.6%	66%
High School #2	13.6%	61%
High School #3	2.4%	59%
High School #4	6.5%	69%
High School #5	28.4%	53%
High School #6	0.5%	78%
High School #7	30.8%	45%
High School #8	32.6%	50%
High School #9	23.4%	48%
High School #10	4.6%	48%
High School #11	0.8%	57%
High School #12	2.9%	77%
High School #13	4.1%	67%
High School #14	9.8%	66%
High School #15	11.8%	51%
High School #16	6.6%	58%

Table H17 (continued)

High School Passing Percentage for TAKS Math 2006-2007

Schools	African-American Teacher %	Passing %
High School #17	10.0%	48%
High School #18	6.2%	69%
High School #19	10.3%	41%
High School #20	7.6%	58%
High School #21	15.3%	36%
High School #22	13.3%	59%
High School #23	8.2%	36%
High School #24	10.7%	51%
High School #25	6.7%	50%
High School #26	8.7%	41%
High School #27	56.3%	37%
High School #28	3.3%	62%
High School #29	7.2%	50%
High School #30	11.1%	50%
High School #31	12.6%	52%
High School #32	4.9%	65%
High School #33	11.5%	55%
High School #34	6.6%	64%
High School #35	2.6%	77%
High School #36	5.2%	70%
High School #37	1.4%	77%
High School #38	5.7%	69%
High School #39	3.1%	71%
High School #40	3.6%	61%
High School #41	5.9%	64%
High School #42	4.2%	67%
High School #43	9.0%	57%
High School #44	9.3%	71%
High School #45	1.5%	65%
High School #46	3.5%	69%
High School #47	0.9%	58%
High School #48	14.6%	47%
High School #49	3.9%	44%
High School #50	0.0%	73%

Table H18

High School Passing Percentage for TAKS Math 2007-2008

Schools	African-American Teacher %	Passing %
High School #1	6.2%	60
High School #2	11.3%	54
High School #3	2.5%	64
High School #4	7.5%	66
High School #5	27.8%	58
High School #6	1.5%	76
High School #7	40.1%	46
High School #8	35.1%	48
High School #9	24.2%	48
High School #10	7.7%	52
High School #11	1.0%	43
High School #12	1.8%	75
High School #13	4.8%	73
High School #14	8.9%	70
High School #15	16.6%	51
High School #16	8.3%	66
High School #17	8.3%	59
High School #18	6.8%	73
High School #19	10.8%	45
High School #20	7.6%	71
High School #21	13.2%	46
High School #22	11.7%	68
High School #23	9.4%	40
High School #24	8.1%	60
High School #25	8.6%	51
High School #26	11.1%	44
High School #27	65.1%	43
High School #28	7.1%	63
High School #29	9.4%	52
High School #30	11.0%	45
High School #31	14.6%	43
High School #32	6.0%	61
High School #33	13.6%	50
High School #34	7.4%	65
High School #35	3.5%	76
High School #36	5.8%	76
High School #37	1.8%	81

Table H18 (continued)

High School Passing Percentage for TAKS Math 2007-2008

Schools	African-American Teacher %	Passing %
High School #38	4.7%	76%
High School #39	3.1%	65%
High School #40	9.1%	63%
High School #41	5.7%	61%
High School #42	2.0%	57%
High School #43	13.1%	63%
High School #44	10.5%	75%
High School #45	1.3%	65%
High School #46	2.7%	57%
High School #47	0.9%	53%
High School #48	13.6%	39%
High School #49	3.9%	64%
High School #50	0.0%	38%

Table H19

Middle School Passing Percentage for TAKS Science 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #1	21.5%	72%
Middle School #2	0.0%	77%
Middle School #3	42.0%	46%
Middle School #4	17.6%	41%
Middle School #5	7.2%	65%
Middle School #6	51.8%	59%
Middle School #7	25.3%	48%
Middle School #8	57.6%	58%
Middle School #9	43.7%	59%
Middle School #10	46.4%	7%
Middle School #11	3.5%	65%
Middle School #12	3.1%	79%
Middle School #13	10.9%	67%
Middle School #14	13.0%	65%
Middle School #15	29.3%	52%

Table H19 (continued)

Middle School Passing Percentage for TAKS Science 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #16	15.1%	55%
Middle School #17	10.9%	36%
Middle School #18	20.2%	7%
Middle School #19	9.6%	7%
Middle School #20	11.3%	68%
Middle School #21	5.4%	63%
Middle School #22	15.7%	45%
Middle School #23	6.5%	33%
Middle School #24	10.6%	33%
Middle School #25	4.3%	5%
Middle School #26	6.1%	63%
Middle School #27	22.3%	67%
Middle School #28	2.2%	94%
Middle School #29	2.5%	77%
Middle School #30	3.2%	63%
Middle School #31	5.30%	78%
Middle School #32	85.3%	38%
Middle School #33	3.5%	75%
Middle School #34	7.8%	59%
Middle School #35	9.2%	73%
Middle School #36	5.1%	56%
Middle School #37	8.3%	57%
Middle School #38	23.6%	54%
Middle School #39	7.2%	54%
Middle School #40	15.7%	73%
Middle School #41	4.3%	67%
Middle School #42	10.8%	68%
Middle School #43	13.5%	52%
Middle School #44	13.6%	43%
Middle School #45	1.7%	57%
Middle School #46	7.2%	8%
Middle School #47	12.5%	66%
Middle School #48	2.0%	71%
Middle School #49	43.7%	59%
Middle School #50	28.9%	N/A

Table H20

Middle School Passing Percentage for TAKS Science 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #1	16.4%	54%
Middle School #2	3.1%	87%
Middle School #3	43.8%	53%
Middle School #4	33.4%	52%
Middle School #5	10.8%	55%
Middle School #6	72.1%	47%
Middle School #7	30.0%	52%
Middle School #8	62.6%	61%
Middle School #9	42.2%	57%
Middle School #10	47.7%	7%
Middle School #11	6.9%	42%
Middle School #12	1.9%	73%
Middle School #13	11.7%	57%
Middle School #14	11.6%	54%
Middle School #15	43.4%	61%
Middle School #16	10.6%	57%
Middle School #17	10.0%	4%
Middle School #18	24.7%	74%
Middle School #19	10.5%	73%
Middle School #20	18.3%	65%
Middle School #21	6.8%	52%
Middle School #22	17.3%	56%
Middle School #23	12.7%	5%
Middle School #24	18.6%	4%
Middle School #25	4.2%	5%
Middle School #26	7.9%	63%
Middle School #27	20.9%	69%
Middle School #28	5.7%	63%
Middle School #29	5.1%	33%
Middle School #30	6.2%	68%
Middle School #31	5.3%	63%
Middle School #32	82.3%	4%
Middle School #33	3.1%	65%
Middle School #34	10.8%	57%
Middle School #35	7.7%	69%

Table H20 (continued)

Middle School Passing Percentage for TAKS Science 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #35	7.7%	69%
Middle School #36	8.7%	6%
Middle School #37	5.2%	67%
Middle School #38	21.8%	5%
Middle School #39	9.1%	65%
Middle School #40	16.6%	75%
Middle School #41	4.0%	67%
Middle School #42	10.1%	71%
Middle School #43	21.6%	58%
Middle School #44	17.1%	64%
Middle School #45	2.9%	61%
Middle School #46	5.4%	86%
Middle School #47	10.9%	76%
Middle School #48	1.8%	66%
Middle School #49	20.2%	43%
Middle School #50	24.8%	N/A

Table H21

Middle School Passing Percentage for TAKS Science 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #1	12.3%	79%
Middle School #2	6.3%	67%
Middle School #3	64.1%	52%
Middle School #4	32.4%	58%
Middle School #5	4.0%	38%
Middle School #6	70.8%	53%
Middle School #7	30.8%	54%
Middle School #8	60.9%	48%
Middle School #9	45.4%	56%
Middle School #10	54.3%	68%
Middle School #11	7.1%	42%
Middle School #12	2.3%	7%

Table H21

Middle School Passing Percentage for TAKS Science 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #13	10.1%	79%
Middle School #14	14.1%	73%
Middle School #15	38.8%	47%
Middle School #16	13.3%	55%
Middle School #17	16.2%	68%
Middle School #18	28%	82%
Middle School #19	9.5%	71%
Middle School #20	20.8%	47%
Middle School #21	11.3%	43%
Middle School #22	17.3%	5%
Middle School #23	20.9%	41%
Middle School #24	16.6%	16%
Middle School #25	2.8%	57%
Middle School #26	7.7%	61%
Middle School #27	30.0%	71%
Middle School #28	8.2%	85%
Middle School #29	5.8%	54%
Middle School #30	7.1%	4%
Middle School #31	5.3%	67%
Middle School #32	81.9%	39%
Middle School #33	4.7%	75%
Middle School #34	8.3%	53%
Middle School #35	11.4%	59%
Middle School #36	6.5%	54%
Middle School #37	8.1%	4%
Middle School #38	22.5%	54%
Middle School #39	17.7%	61%
Middle School #40	13.8%	64%
Middle School #41	3.8%	67%
Middle School #42	5.9%	83%
Middle School #43	28.5%	72%
Middle School #44	22.2%	81%
Middle School #45	7.5%	51%
Middle School #46	8.6%	84%
Middle School #47	8.6%	78%

Table H21 (continued)

Middle School Passing Percentage for TAKS Science 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #48	1.6%	5%
Middle School #49	20.2%	55%
Middle School #50	18.1%	N/A

Table H22

High School Passing Percentage for TAKS Science 2005-2006

Schools	African-American Teacher %	Passing %
High School #1	5.0%	66%
High School #2	16.2%	64%
High School #3	1.9%	59%
High School #4	5.6%	66%
High School #5	19.3%	46%
High School #6	0.0%	76%
High School #7	28.2%	N/A
High School #8	23.9%	50%
High School #9	20.4%	44%
High School #10	4.6%	44%
High School #11	0.0%	60%
High School #12	2.6%	74%
High School #13	3.1%	67%
High School #14	9.7%	62%
High School #15	11.4%	49%
High School #16	7.1%	50%
High School #17	8.7%	47%
High School #18	6.8%	60%
High School #19	9.5%	50%
High School #20	9.5%	52%
High School #21	12.8%	33%
High School #22	11.2%	51%
High School #23	13.4%	29%
High School #24	6.3%	40%
High School #25	5.0%	50%

Table H22 (continue)

High School Passing Percentage for TAKS Science 2005-2006

Schools	African-American Teacher %	Passing %
High School #25	5.0%	50%
High School #26	7.3%	65%
High School #27	53.8%	36%
High School #28	6.2%	73%
High School #29	8.2%	57%
High School #30	12.7%	44%
High School #31	8.5%	44%
High School #32	5.7%	55%
High School #33	11.2%	44%
High School #34	15.4%	63%
High School #35	3.4%	87%
High School #36	5.5%	74%
High School #37	2.7%	84%
High School #38	5.1%	70%
High School #39	3.2%	70%
High School #40	1.9%	75%
High School #41	4.1%	68%
High School #42	3.2%	67%
High School #43	9.2%	52%
High School #44	10.3%	75%
High School #45	1.3%	78%
High School #46	4.0%	47%
High School #47	2.1%	46%
High School #48	10.3%	52%
High School #49	4.1%	48%
High School #50	2.9%	34%

Table H23

High School Passing Percentage for TAKS Science 2006-2007

Schools	African-American Teacher %	Passing %
High School #1	5.60%	67%
High School #2	13.6%	63%

Table H23 (continued)

High School Passing Percentage for TAKS Science 2006-2007

Schools	African-American Teacher %	Passing %
High School #3	2.4%	65%
High School #4	6.5%	69%
High School #5	28.4%	54%
High School #6	0.5%	75%
High School #7	30.8%	N/A
High School #8	32.6%	40%
High School #9	23.4%	43%
High School #10	4.6%	35%
High School #11	0.8%	51%
High School #12	2.9%	74%
High School #13	4.1%	68%
High School #14	9.8%	68%
High School #15	11.8%	54%
High School #16	6.6%	47%
High School #17	10.0%	48%
High School #18	6.20%	62%
High School #19	10.3%	43%
High School #20	7.6%	51%
High School #21	15.3%	43%
High School #22	13.3%	51%
High School #23	8.2%	38%
High School #24	10.7%	52%
High School #25	6.7%	52%
High School #26	8.7%	45%
High School #27	56.3%	36%
High School #28	3.3%	64%
High School #29	7.2%	58%
High School #30	11.1%	50%
High School #31	12.6%	41%
High School #32	4.9%	52%
High School #33	11.5%	56%
High School #34	6.6%	64%
High School #35	2.6%	77%
High School #36	5.2%	75%
High School #37	1.4%	80%

Table H23 (continued)

High School Passing Percentage for TAKS Science 2006-2007

Schools	African-American Teacher %	Passing %
High School #38	5.7%	73%
High School #39	3.1%	69%
High School #40	3.6%	54%
High School #41	5.9%	59%
High School #42	4.2%	53%
High School #43	9.0%	52%
High School #44	9.3%	80%
High School #45	1.5%	60%
High School #46	3.5%	54%
High School #47	0.9%	47%
High School #48	14.6%	38%
High School #49	3.9%	40%
High School #50	0.0%	N/A

Table H24

High School Passing Percentage for TAKS Science 2007-2008

Schools	African-American Teacher %	Passing %
High School #1	6.2%	70%
High School #2	11.3%	62%
High School #3	2.5%	69%
High School #4	7.5%	76%
High School #5	27.8%	59%
High School #6	1.5%	77%
High School #7	40.1%	N/A
High School #8	35.1%	48%
High School #9	24.2%	48%
High School #10	7.7%	58%
High School #11	1.0%	40%
High School #12	1.8%	69%
High School #13	4.8%	74%
High School #14	8.9%	68%
High School #15	16.6%	61%

Table H24 (continued)

High School Passing Percentage for TAKS Science 2007-2008

Schools	African-American Teacher %	Passing %
High School #16	8.3%	63%
High School #17	8.3%	62%
High School #18	6.8%	75%
High School #19	10.8%	53%
High School #20	7.6%	74%
High School #21	13.2%	51%
High School #22	11.7%	70%
High School #23	9.4%	39%
High School #24	8.1%	67%
High School #25	8.6%	54%
High School #26	11.1%	63%
High School #27	65.1%	49%
High School #28	7.1%	68%
High School #29	9.4%	67%
High School #30	11.0%	52%
High School #31	14.6%	51%
High School #32	6.0%	65%
High School #33	13.6%	53%
High School #34	7.4%	64%
High School #35	3.5%	72%
High School #36	5.8%	77%
High School #37	1.8%	82%
High School #38	4.7%	76%
High School #39	3.1%	74%
High School #40	9.1%	63%
High School #41	5.7%	52%
High School #42	2.0%	64%
High School #43	13.1%	62%
High School #44	10.5%	78%
High School #45	1.3%	70%
High School #46	2.7%	65%
High School #47	0.9%	49%
High School #48	13.6%	51%
High School #49	3.9%	58%
High School #50	0.0%	N/A

Table H25

Middle School Passing Percentage for TAKS Writing 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #1	21.5%	94%
Middle School #2	0.0%	95%
Middle School #3	42.0%	86%
Middle School #4	17.6%	88%
Middle School #5	7.2%	78%
Middle School #6	51.8%	85%
Middle School #7	25.3%	90%
Middle School #8	57.6%	95%
Middle School #9	43.7%	92%
Middle School #10	46.4%	92%
Middle School #11	3.5%	88%
Middle School #12	3.1%	99%
Middle School #13	10.9%	88%
Middle School #14	13.0%	89%
Middle School #15	29.3%	86%
Middle School #16	15.1%	88%
Middle School #17	10.9%	80%
Middle School #18	20.2%	88%
Middle School #19	9.6%	97%
Middle School #20	11.3%	93%
Middle School #21	5.4%	91%
Middle School #22	15.7%	92%
Middle School #23	6.5%	84%
Middle School #24	10.6%	88%
Middle School #25	4.3%	80%
Middle School #26	6.1%	91%
Middle School #27	22.3%	98%
Middle School #28	2.2%	97%
Middle School #29	2.5%	86%
Middle School #30	3.2%	97%
Middle School #31	5.3%	87%
Middle School #32	85.3%	76%
Middle School #33	3.5%	92%
Middle School #34	7.8%	90%
Middle School #35	9.2%	98%

Table H25 (continued)

Middle School Passing Percentage for TAKS Writing 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #36	5.1%	92%
Middle School #37	8.3%	88%
Middle School #38	23.6%	87%
Middle School #39	7.2%	91%
Middle School #40	15.7%	84%
Middle School #41	4.3%	89%
Middle School #42	10.8%	97%
Middle School #43	13.5%	86%
Middle School #44	13.6%	79%
Middle School #45	1.7%	87%
Middle School #46	7.2%	91%
Middle School #47	12.5%	93%
Middle School #48	2.0%	95%
Middle School #49	43.7%	92%
Middle School #50	28.9%	N/A

Table H26

Middle School Passing Percentage for TAKS Writing 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #1	16.4%	95%
Middle School #2	3.1%	89%
Middle School #3	43.8%	93%
Middle School #4	33.4%	90%
Middle School #5	10.8%	83%
Middle School #6	72.1%	91%
Middle School #7	30.0%	91%
Middle School #8	62.6%	93%
Middle School #9	42.2%	94%
Middle School #10	47.7%	98%
Middle School #11	6.9%	84%
Middle School #12	1.9%	98%
Middle School #13	11.7%	85%

Table H26 (continued)

Middle School Passing Percentage for TAKS Writing 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #14	11.6%	87%
Middle School #15	43.4%	91%
Middle School #16	10.6%	91%
Middle School #17	10.0%	94%
Middle School #18	24.7%	93%
Middle School #19	10.5%	96%
Middle School #20	18.3%	96%
Middle School #21	6.8%	89%
Middle School #22	17.3%	92%
Middle School #23	12.7%	86%
Middle School #24	18.6%	85%
Middle School #25	4.2%	87%
Middle School #26	7.9%	92%
Middle School #27	20.9%	95%
Middle School #28	5.7%	96%
Middle School #29	5.1%	77%
Middle School #30	6.2%	83%
Middle School #31	5.3%	92%
Middle School #32	82.3%	92%
Middle School #33	3.1%	98%
Middle School #34	10.8%	95%
Middle School #35	7.7%	96%
Middle School #36	8.7%	91%
Middle School #37	5.2%	96%
Middle School #38	21.8%	98%
Middle School #39	9.1%	91%
Middle School #40	16.6%	92%
Middle School #41	4.0%	93%
Middle School #42	10.1%	96%
Middle School #43	21.6%	97%
Middle School #44	17.1%	98%
Middle School #45	2.9%	86%
Middle School #46	5.4%	93%
Middle School #47	10.9%	95%
Middle School #48	1.8%	97%

Table H26 (continued)

Middle School Passing Percentage for TAKS Writing 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #49	20.2%	97%
Middle School #50	24.8%	N/A

Table H27

Middle School Passing Percentage for TAKS Writing 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #1	12.3%	92%
Middle School #2	6.3%	98%
Middle School #3	64.1%	96%
Middle School #4	32.4%	92%
Middle School #5	4.0%	99%
Middle School #6	70.8%	89%
Middle School #7	30.8%	86%
Middle School #8	60.9%	96%
Middle School #9	45.4%	98%
Middle School #10	54.3%	95%
Middle School #11	7.1%	84%
Middle School #12	2.3%	99%
Middle School #13	10.1%	82%
Middle School #14	14.1%	93%
Middle School #15	38.8%	94%
Middle School #16	13.3%	87%
Middle School #17	16.2%	92%
Middle School #18	28.0%	88%
Middle School #19	9.5%	94%
Middle School #20	20.8%	87%
Middle School #21	11.3%	98%
Middle School #22	17.3%	87%
Middle School #23	20.9%	83%
Middle School #24	16.6%	90%
Middle School #25	2.8%	69%
Middle School #26	7.7%	97%

Table H27 (continued)

Middle School Passing Percentage for TAKS Writing 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #27	30.0%	95%
Middle School #28	8.2%	93%
Middle School #29	5.8%	99%
Middle School #30	7.1%	92%
Middle School #31	5.3%	89%
Middle School #32	81.9%	85%
Middle School #33	4.7%	99%
Middle School #34	8.3%	92%
Middle School #35	11.4%	97%
Middle School #36	6.5%	91%
Middle School #37	8.1%	95%
Middle School #38	22.5%	93%
Middle School #39	17.7%	89%
Middle School #40	13.8%	93%
Middle School #41	3.8%	99%
Middle School #42	5.9%	98%
Middle School #43	28.5%	86%
Middle School #44	22.2%	91%
Middle School #45	7.5%	84%
Middle School #46	8.6%	95%
Middle School #47	8.6%	99%
Middle School #48	1.6%	97%
Middle School #49	20.2%	92%
Middle School #50	18.1%	N/A

Table H28

Middle School Passing Percentage for TAKS Social Studies 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #1	21.5%	87
Middle School #2	0.0%	94
Middle School #3	42.0%	58
Middle School #4	17.6%	74

Table H28 (continue)

Middle School Passing Percentage for TAKS Social Studies 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #5	7.2%	90%
Middle School #6	51.8%	76%
Middle School #7	25.3%	77%
Middle School #8	57.6%	78%
Middle School #9	43.7%	82%
Middle School #10	46.4%	91%
Middle School #11	3.5%	91%
Middle School #12	3.1%	99%
Middle School #13	10.9%	97%
Middle School #14	13.0%	87%
Middle School #15	29.3%	82%
Middle School #16	15.1%	76%
Middle School #17	10.9%	79%
Middle School #18	20.2%	90%
Middle School #19	9.6%	95%
Middle School #20	11.3%	85%
Middle School #21	5.4%	88%
Middle School #22	15.7%	64%
Middle School #23	6.5%	61%
Middle School #24	10.6%	68%
Middle School #25	4.3%	93%
Middle School #26	6.1%	93%
Middle School #27	22.3%	85%
Middle School #28	2.2%	88%
Middle School #29	2.5%	85%
Middle School #30	3.2%	87%
Middle School #31	5.3%	89%
Middle School #32	85.3%	44%
Middle School #33	3.5%	83%
Middle School #34	7.8%	88%
Middle School #35	9.2%	92%
Middle School #36	5.1%	83%
Middle School #37	8.3%	88%
Middle School #38	23.6%	79%
Middle School #39	7.2%	84%

Table H28 (continue)

Middle School Passing Percentage for TAKS Social Studies 2005-2006

Schools	African-American Teacher %	Passing %
Middle School #40	15.7%	86%
Middle School #41	4.3%	97%
Middle School #42	10.8%	86%
Middle School #43	13.5%	71%
Middle School #44	13.6%	77%
Middle School #45	1.7%	86%
Middle School #46	7.2%	82%
Middle School #47	12.5%	88%
Middle School #48	2.0%	89%
Middle School #49	43.7%	82%
Middle School #50	28.9%	N/A

Table H29

Middle School Passing Percentage for TAKS Social Studies 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #1	16.4%	86%
Middle School #2	3.1%	89%
Middle School #3	43.8%	82%
Middle School #4	33.4%	83%
Middle School #5	10.8%	82%
Middle School #6	72.1%	86%
Middle School #7	30.0%	79%
Middle School #8	62.6%	80%
Middle School #9	42.2%	91%
Middle School #10	47.7%	90%
Middle School #11	6.9%	84%
Middle School #12	1.9%	91%
Middle School #13	11.7%	85%
Middle School #14	11.6%	95%
Middle School #15	43.4%	90%
Middle School #16	10.6%	95%
Middle School #17	10.0%	88%

Table H29 (continued)

Middle School Passing Percentage for TAKS Social Studies 2006-2007

Schools	African-American Teacher %	Passing %
Middle School #18	24.7%	90%
Middle School #19	10.5%	97%
Middle School #20	18.3%	96%
Middle School #21	6.8%	83%
Middle School #22	17.3%	76%
Middle School #23	12.7%	88%
Middle School #24	18.6%	64%
Middle School #25	4.2%	83%
Middle School #26	7.9%	86%
Middle School #27	20.9%	89%
Middle School #28	5.7%	92%
Middle School #29	5.1%	83%
Middle School #30	6.2%	97%
Middle School #31	5.3%	75%
Middle School #32	82.3%	67%
Middle School #33	3.1%	98%
Middle School #34	10.8%	88%
Middle School #35	7.7%	96%
Middle School #36	8.7%	78%
Middle School #37	5.2%	85%
Middle School #38	21.8%	78%
Middle School #39	9.1%	94%
Middle School #40	16.6%	96%
Middle School #41	4.0%	89%
Middle School #42	10.1%	86%
Middle School #43	21.6%	89%
Middle School #44	17.1%	84%
Middle School #45	2.9%	88%
Middle School #46	5.4%	95%
Middle School #47	10.9%	97%
Middle School #48	1.8%	98%
Middle School #49	20.2%	73%
Middle School #50	24.8%	N/A

Table H30

Middle School Passing Percentage for TAKS Social Studies 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #1	12.3%	97%
Middle School #2	6.3%	83%
Middle School #3	64.1%	95%
Middle School #4	32.4%	90%
Middle School #5	4.0%	83%
Middle School #6	70.8%	90%
Middle School #7	30.8%	85%
Middle School #8	60.9%	79%
Middle School #9	45.4%	77%
Middle School #10	54.3%	92%
Middle School #11	7.1%	82%
Middle School #12	2.3%	95%
Middle School #13	10.1%	97%
Middle School #14	14.1%	88%
Middle School #15	38.8%	87%
Middle School #16	13.3%	98%
Middle School #17	16.2%	86%
Middle School #18	28.0%	98%
Middle School #19	9.5%	91%
Middle School #20	20.8%	93%
Middle School #21	11.3%	85%
Middle School #22	17.3%	86%
Middle School #23	20.9%	88%
Middle School #24	16.6%	80%
Middle School #25	2.8%	93%
Middle School #26	7.7%	96%
Middle School #27	30.0%	91%
Middle School #28	8.2%	99%
Middle School #29	5.8%	99%
Middle School #30	7.1%	88%
Middle School #31	5.3%	76%
Middle School #32	81.9%	72%
Middle School #33	4.7%	94%
Middle School #34	8.3%	94%
Middle School #35	11.4%	92%

Table H30 (continue)

Middle School Passing Percentage for TAKS Social Studies 2007-2008

Schools	African-American Teacher %	Passing %
Middle School #36	6.5%	85%
Middle School #37	8.1%	88%
Middle School #38	22.5%	83%
Middle School #39	17.7%	95%
Middle School #40	13.8%	93%
Middle School #41	3.8%	94%
Middle School #42	5.9%	98%
Middle School #43	28.5%	95%
Middle School #44	22.2%	91%
Middle School #45	7.5%	87%
Middle School #46	8.6%	97%
Middle School #47	8.6%	93%
Middle School #48	1.6%	97%
Middle School #49	20.2%	89%
Middle School #50	18.1%	N/A

Table H31

High School Passing Percentage for TAKS Social Studies 2005-2006

Schools	African-American Teacher %	Passing %
High School #1	5.0%	93
High School #2	16.2%	93
High School #3	1.9%	86
High School #4	5.6%	91
High School #5	19.3%	83
High School #6	0.0%	93
High School #7	28.2%	N/A
High School #8	23.9%	85
High School #9	20.4%	84
High School #10	4.6%	74
High School #11	0.0%	93
High School #12	2.6%	96
High School #13	3.1%	94

Table H31 (continue)

High School Passing Percentage for TAKS Social Studies 2005-2006

Schools	African-American Teacher %	Passing %
High School #14	9.7%	89%
High School #15	11.4%	69%
High School #16	7.1%	83%
High School #17	8.7%	89%
High School #18	6.8%	93%
High School #19	9.5%	82%
High School #20	9.5%	91%
High School #21	12.8%	73%
High School #22	11.2%	89%
High School #23	13.4%	69%
High School #24	6.3%	79%
High School #25	5.0%	92%
High School #26	7.3%	86%
High School #27	53.8%	80%
High School #28	6.2%	96%
High School #29	8.2%	84%
High School #30	12.7%	84%
High School #31	8.5%	77%
High School #32	5.7%	82%
High School #33	11.2%	84%
High School #34	15.4%	85%
High School #35	3.4%	98%
High School #36	5.5%	98%
High School #37	2.7%	98%
High School #38	5.1%	96%
High School #39	3.2%	92%
High School #40	1.9%	92%
High School #41	4.1%	91%
High School #42	3.2%	89%
High School #43	9.2%	88%
High School #44	10.3%	95%
High School #45	1.3%	99%
High School #46	4.0%	74%
High School #47	2.1%	90%
High School #48	10.3%	77%

Table H31 (continue)

High School Passing Percentage for TAKS Social Studies 2005-2006

Schools	African-American Teacher %	Passing %
High School #49	4.1%	83%
High School #50	2.9%	N/A

Table H32

High School Passing Percentage for TAKS Social Studies 2006-2007

Schools	African-American Teacher %	Passing %
High School #1	5.6%	89%
High School #2	13.6%	90%
High School #3	2.4%	93%
High School #4	6.5%	97%
High School #5	28.4%	85%
High School #6	0.5%	94%
High School #7	30.8%	N/A
High School #8	32.6%	79%
High School #9	23.4%	82%
High School #10	4.6%	76%
High School #11	0.8%	72%
High School #12	2.9%	94%
High School #13	4.1%	93%
High School #14	9.8%	90%
High School #15	11.8%	84%
High School #16	6.6%	85%
High School #17	10.0%	92%
High School #18	6.2%	89%
High School #19	10.3%	82%
High School #20	7.6%	82%
High School #21	15.3%	76%
High School #22	13.3%	82%
High School #23	8.2%	65%
High School #24	10.7%	86%
High School #25	6.7%	82%
High School #26	8.7%	73%

Table H32 (continued)

High School Passing Percentage for TAKS Social Studies 2006-2007

Schools	African-American Teacher %	Passing %
High School #27	56.3%	73%
High School #28	3.3%	88%
High School #29	7.2%	84%
High School #30	11.1%	82%
High School #31	12.6%	79%
High School #32	4.9%	88%
High School #33	11.5%	82%
High School #34	6.6%	91%
High School #35	2.6%	96%
High School #36	5.2%	96%
High School #37	1.4%	97%
High School #38	5.7%	92%
High School #39	3.1%	94%
High School #40	3.6%	92%
High School #41	5.9%	81%
High School #42	4.2%	88%
High School #43	9.0%	78%
High School #44	9.3%	90%
High School #45	1.5%	94%
High School #46	3.5%	94%
High School #47	0.9%	76%
High School #48	14.6%	71%
High School #49	3.9%	74%
High School #50	0.0%	N/A

Table H33

High School Passing Percentage for TAKS Social Studies 2007-2008

Schools	African-American Teacher %	Passing %
High School #1	6.2%	93%
High School #2	11.3%	87%
High School #3	2.5%	93%
High School #4	7.5%	91%

Table H33 (continue)

High School Passing Percentage for TAKS Social Studies 2007-2008

Schools	African-American Teacher %	Passing %
High School #5	27.8%	89%
High School #6	1.5%	89%
High School #7	40.1%	N/A
High School #8	35.1%	85%
High School #9	24.2%	84%
High School #10	7.7%	92%
High School #11	1.0%	86%
High School #12	1.8%	98%
High School #13	4.8%	99%
High School #14	8.9%	91%
High School #15	16.6%	90%
High School #16	8.3%	92%
High School #17	8.3%	92%
High School #18	6.8%	94%
High School #19	10.8%	88%
High School #20	7.6%	98%
High School #21	13.2%	81%
High School #22	11.7%	93%
High School #23	9.4%	87%
High School #24	8.1%	93%
High School #25	8.6%	88%
High School #26	11.1%	83%
High School #27	65.1%	82%
High School #28	7.1%	94%
High School #29	9.4%	92%
High School #30	11.0%	87%
High School #31	14.6%	86%
High School #32	6.0%	93%
High School #33	13.6%	87%
High School #34	7.4%	91%
High School #35	3.5%	92%
High School #36	5.8%	96%
High School #37	1.8%	99%
High School #38	4.7%	99%
High School #39	3.1%	88%

Table H33 (continue)

High School Passing Percentage for TAKS Social Studies 2007-2008

Schools	African-American Teacher %	Passing %
High School #40	9.1%	86%
High School #41	5.7%	83%
High School #42	2.0%	87%
High School #43	13.1%	91%
High School #44	10.5%	96%
High School #45	1.3%	88%
High School #46	2.7%	94%
High School #47	0.9%	85%
High School #48	13.6%	83%
High School #49	3.9%	87%
High School #50	0.0%	N/A

Table H34

High School Average SAT and ACT Scores 2005-2006

Schools	% African-American Teachers	SAT	ACT
High School #1	5.0%	942	17.6
High School #2	16.2%	N/A	N/A
High School #3	1.9%	852	17.3
High School #4	5.6%	928	18.4
High School #5	19.3%	845	17.4
High School #6	0.0%	949	20.9
High School #7	28.2%	N/A	N/A
High School #8	23.9%	891	18.5
High School #9	20.4%	891	18
High School #10	4.6%	N/A	N/A
High School #11	0.0%	846	N/A
High School #12	2.6%	N/A	N/A
High School #13	3.1%	943	20
High School #14	9.7%	964	19.5
High School #15	11.4%	884	18
High School #16	7.1%	845	17.6
High School #17	8.7%	940	19.8

Table H34 (continue)

High School Average SAT and ACT Scores 2005-2006

Schools	% African-American Teachers	SAT	ACT
High School #17	8.7%	940	19.8
High School #18	6.8%	863	17.7
High School #19	9.5%	899	17.2
High School #20	9.5%	861	N/A
High School #21	12.8%	883	17.8
High School #22	11.2%	864	16.1
High School #23	13.4%	840	14.6
High School #24	6.3%	794	16.4
High School #25	5.0%	863	16.2
High School #26	7.3%	805	17.5
High School #27	53.8%	794	16
High School #28	6.2%	894	N/A
High School #29	8.2%	853	17.3
High School #30	12.7%	864	17.3
High School #31	8.5%	840	16.4
High School #32	5.7%	928	17.1
High School #33	11.2%	799	16.9
High School #34	15.4%	N/A	N/A
High School #35	3.4%	N/A	N/A
High School #36	5.5%	962	20.3
High School #37	2.7%	1053	20.3
High School #38	5.1%	945	19.9
High School #39	3.2%	N/A	N/A
High School #40	1.9%	N/A	N/A
High School #41	4.1%	N/A	N/A
High School #42	3.2%	854	17.9
High School #43	9.2%	861	17.4
High School #44	10.3%	910	17.7
High School #45	1.3%	909	17.3
High School #46	4.0%	N/A	N/A
High School #47	2.1%	911	17
High School #48	10.3%	783	16.4
High School #49	4.1%	862	17.6
High School #50	2.9%	N/A	N/A

Table H35

High School Average SAT and ACT Scores 2006-2007

Schools	% African-American Teachers	SAT	ACT
High School #1	5.6%	930	21.1
High School #2	13.6%	895	15.6
High School #3	2.4%	921	16.7
High School #4	6.5%	880	18.7
High School #5	28.4%	849	17.6
High School #6	0.5%	981	20.4
High School #7	30.8%	N/A	N/A
High School #8	32.6%	882	17.8
High School #9	23.4%	892	18
High School #10	4.6%	N/A	15.9
High School #11	0.8%	886	15.6
High School #12	2.9%	953	20.6
High School #13	4.1%	866	21.4
High School #14	9.8%	913	18.9
High School #15	11.8%	880	17.5
High School #16	6.6%	901	18.1
High School #17	10.0%	932	19.1
High School #18	6.2%	909	17.8
High School #19	10.3%	865	15.7
High School #20	7.6%	956	19.4
High School #21	15.3%	876	17
High School #22	13.3%	886	18.3
High School #23	8.2%	735	15.2
High School #24	10.7%	843	17
High School #25	6.7%	863	19.7
High School #26	8.7%	838	17
High School #27	56.3%	800	15.7
High School #28	3.3%	924	N/A
High School #29	7.2%	931	19.7
High School #30	11.1%	861	16.9
High School #31	12.6%	912	17.3
High School #32	4.9%	897	18.1
High School #33	11.5%	831	16.4
High School #34	6.6%	N/A	N/A
High School #35	2.6%	N/A	N/A

Table H35 (continue)

High School Average SAT and ACT Scores 2006-2007

Schools	% African-American Teachers	SAT	ACT
High School #36	5.2%	953	19.5
High School #37	1.4%	1021	20.1
High School #38	5.7%	1037	19.9
High School #39	3.1%	N/A	N/A
High School #40	3.6%	N/A	N/A
High School #41	5.9%	N/A	N/A
High School #42	4.2%	883	17.6
High School #43	9.0%	882	17.1
High School #44	9.3%	880	17.8
High School #45	1.5%	848	17.9
High School #46	3.5%	N/A	N/A
High School #47	0.9%	978	17.2
High School #48	14.6%	788	16.4
High School #49	3.9%	757	N/A
High School #50	0.0%	N/A	N/A

Table H36

High School Average SAT and ACT Scores 2007-2008

Schools	% African-American Teachers	SAT	ACT
High School #1	6.2%	878	16.7
High School #2	11.3%	899	15.9
High School #3	2.5%	901	17.1
High School #4	7.5%	963	N/A
High School #5	27.8%	941	18.3
High School #6	1.5%	1009	N/A
High School #7	40.1%	N/A	N/A
High School #8	35.1%	894	18.1
High School #9	24.2%	929	17.7
High School #10	7.7%	853	17.7
High School #11	1.0%	887	15.8
High School #12	1.8%	974	18.1
High School #13	4.8%	979	19.1

Table H36 (continue)

High School Average SAT and ACT Scores 2007-2008

Schools	% African-American Teachers	SAT	ACT
High School #14	8.9%	932	18.1
High School #15	16.6%	823	16.7
High School #16	8.3%	884	17
High School #17	8.3%	851	18
High School #18	6.8%	903	17.5
High School #19	10.8%	848	16.4
High School #20	7.6%	855	16.5
High School #21	13.2%	845	18.1
High School #22	11.7%	879	17.7
High School #23	9.4%	805	15.8
High School #24	8.1%	802	16
High School #25	8.6%	865	17.1
High School #26	11.1%	944	18
High School #27	65.1%	825	16.7
High School #28	7.1%	891	17.9
High School #29	9.4%	906	17.1
High School #30	11.0%	860	16.1
High School #31	14.6%	891	16.1
High School #32	6.0%	926	17.2
High School #33	13.6%	876	16.8
High School #34	7.4%	946	N/A
High School #35	3.5%	N/A	N/A
High School #36	5.8%	956	20.1
High School #37	1.8%	997	21.8
High School #38	4.7%	1016	21.6
High School #39	3.1%	N/A	N/A
High School #40	9.1%	N/A	N/A
High School #41	5.7%	N/A	N/A
High School #42	2.0%	940	18
High School #43	13.1%	853	17.6
High School #44	10.5%	936	17.3
High School #45	1.3%	936	19
High School #46	2.7%	N/A	N/A
High School #47	0.9%	1002	18.3
High School #48	13.6%	848	15.9

Table H36 (continue)

High School Average SAT and ACT Scores 2007-2008

Schools	% African-American Teachers	SAT	ACT
High School #49	3.9%	801	14.9
High School #50	0.0%	N/A	N/A