

Copyright
by
Courtney N. Busby
August 2016

AN EXAMINATION OF CAREER ACADAMIES AND THE IMPLICATIONS FOR
THE AFRICAN AMERICAN MALE DROPOUT CRISIS

A Doctoral Thesis Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Education
In Professional Leadership

by

Courtney N. Busby

August 2016

AN EXAMINATION OF CAREER ACADAMIES AND THE IMPLICATIONS FOR
THE AFRICAN AMERICAN MALE DROPOUT CRISIS

A Doctoral Thesis for the Degree
Doctor of Education
by
Courtney N. Busby

Approved by Doctoral Thesis Committee:

Dr. Anthony Rolle, Chairperson

Dr. Virginia Rangel, Committee Member

Dr. Angus MacNeil, Committee Member

Dr. Natalie Blasingame, Committee Member

Robert H. McPherson, Dean
College of Education

August 2016

DEDICATION

My philosophy is that greatness requires the perfect blend of natural ability and skills acquired through education. This journey has empowered me to develop both of these aspects in regards to my professional goals. I have great clarity around the fact that I could not have started nor completed this work without the consistent support of family and friends and the hand of the Lord Almighty.

This work is dedicated to my family. My husband, Brian Busby, has been a consistent support and encourager throughout this process. He has also been a critic when I needed a subliminal propel toward a greater me. My two beautiful daughters, Reagan and Morgan Busby, have been a source of inspiration and energy for me when days were long and perilous. My parents, Vester and Zenobia Jones, have consistently been a guiding light as well as a support. For as long as I can remember they've made the belief that I was able to do anything resonate within my mind and heart. Their strength has been the wind beneath my wings. And lastly to my siblings who've made me laugh along the way. Rhobia Solomon and Christopher Jones are comedic outlets that have helped me through stress filled days.

I know that in addition to my physical being, I am also a spiritual being. God has empowered me with unwavering faith and strength. It is this faith that has empowered me to do this work and for that I am truly grateful. I unapologetically owe this all to my God.

ACKNOWLEDGEMENTS

During this dissertation journey I could not have made it without God and His divine favor and love. I must also acknowledge the contributions of my chair, Dr. Anthony Rolle. Dr. Rolle was crucial to my journey as he assisted with finding my confidence in my presentation style and my ability as a writer. He also challenged me beyond my level of comfort. I would also like to acknowledge Dr. Angus McNeil and Dr. Rangel for their contributions to the profoundness of this work.

Of course, I must also acknowledge my cohort members who encouraged me and served as confidants as we traveled this road together. Dr. Natalie Blasingame has been a consistent mentor and friend for several years and was also a part of this journey, I am grateful for her investment in my professional journey. I would also like to acknowledge my friend and confidant Dr. Lakeisha Hamilton for her support and guidance when needed.

Last but certainly not least, I would like to acknowledge the students that I encounter each and every day. They were truly the inspiration for this work as I am committed to ensuring that all students achieve their maximum potential without experiencing unnecessary barriers to greatness!

AN EXAMINATION OF CAREER ACADAMIES AND THE IMPLICATIONS FOR
THE AFRICAN AMERICAN MALE DROPOUT CRISIS

An Abstract
of a Doctoral Thesis Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Education
in Professional Leadership

by

Courtney N. Busby

August 2016

Busby, Courtney N. "An Examination of Career Academies and the Implications for the African American Male Dropout Crisis." Unpublished Doctoral Thesis, University of Houston, August 2016.

ABSTRACT

A significant disparity exists between the overall dropout rate and the dropout rate for African American males. Research is limited in the area of incorporating programs and initiatives that inspire the aforementioned group to achieve high school completion. The purpose of this study was to examine the differences that exist in the dropout rates for African American males enrolled in career academies and African American males not enrolled in career academies.

A sample size of 641 participants with data available for the 2011-2012 school year and the 2014-2015 school year was randomly selected consisting of African American male students enrolled in career academies and African American male students not enrolled in career academies. The data sources used to collect the quantitative data for this study were archival in nature and retrieved from an available sample. A two-tailed *t*-test was then used to compare the two groups' graduation rates, attendance rates, and grade point averages.

With respect to the central research question of this investigation, the graduation rates of African American males who were enrolled in a career academy were statistically significantly higher than were the graduation rates of African American males who were not enrolled in a career academy.

Table of Contents

Chapter 1	1
Introduction.....	1
Historical Significance of Dropout Rates for African American Males	3
Governmental Interventions and Regulations	4
The Emergence of Career Academies and the Implications for African American Male Students	5
Definition of Terms	7
Research Design	9
Research Questions.....	11
Limitations.....	12
Summary.....	12
Chapter 2.....	14
Literature Review.....	14
Introduction	14
Historical Context for Dropout Rates for African American Males	14
De Facto Segregation and Progressive Transition to Integration	18
Interventive Governmental Regulations.....	20
Critical Race Theory.....	28
Critical Race Theorist’s depiction of the Brown vs. Board of Education Decision..	33
The CRT Perspective on the Disenfranchisement of African American Males in Schools.....	37
Socioeconomic and Cultural Implications for African American Male Dropouts	40

Dropout Prevention Measures through Educational Reforms for African American	
Males	42
Emergence of Career Academies and Implications for Dropout Rates.....	44
Summary.....	48
Chapter 3.....	51
Design of Study.....	51
Methodology.....	51
Introduction	51
Research Questions.....	52
Research Design	52
Setting.....	53
Participants	56
Instruments	57
Data Analysis.....	58
Limitations.....	64
Chapter 4.....	65
Results.....	65
Summary.....	89
Chapter 5.....	92
Conclusions.....	92
Review of study significance.....	92
References.....	104
Appendix A.....	113

Excel File Format.....	113
Appendix B	114
SPSS File Format.....	114

List of Tables

Table 4.1 Descriptive Statistics for Days at School, GPAs, and High School Graduation from 2011-2015 65

Table 4.2 Descriptive Statistics for Days at School, GPAs, and High School Graduation for Students Who Were Not in CTE from 2011-2015 68

Table 4.3 Descriptive Statistics for Days at School, GPAs, and High School Graduation for Students Who Were in CTE from 2011-2015 70

Table 4.4 Descriptive Statistics for Attendance Rates and GPA by Career Academy Enrollment for the 2011-2012 School Year 71

Table 4.5 Frequencies and Percentages of At-Risk by Career Academy Enrollment for the 2011-2012 School Year 73

Table 4.6 Frequencies and Percentages of Special Education Enrollment by Career Academy Enrollment for the 2011-2012 School Year 74

Table 4.7 Descriptive Statistics for Attendance Rates by Career Academy Enrollment for the 2012-2013 School Year 75

Table 4.8 Frequencies and Percentages of At-Risk by Career Academy Enrollment for the 2012-2013 School Year 76

Table 4.9 Frequencies and Percentages of Special Education Enrollment by Career Academy Enrollment for the 2012-2013 School Year 77

Table 4.10 Descriptive Statistics for Attendance Rates and GPA by Career Academy Enrollment for the 2013-2014 School Year 79

Table 4.11 Frequencies and Percentages of At-Risk by Career Academy Enrollment for the 2013-2014 School Year 80

Table 4.12 Frequencies and Percentages of Special Education Enrollment by Career Academy Enrollment for the 2013-2014 School Year	81
Table 4.13 Frequencies and Percentages of Graduation for Students by Career Academy Enrollment.....	82
Table 4.14 Descriptive Statistics for Attendance Rates and GPA by Career Academy Enrollment for the 2014-2015 School Year.....	84
Table 4.15 Descriptive Statistics for Days Enrolled at School, Days Present at School, Attendance Rates, and GPA by Career Academy Enrollment for At-Risk Students for the 2014-2015 School Year	86
Table 4.16 Descriptive Statistics for Days Enrolled at School, Days Present at School, Attendance Rates, and GPA by Career Academy Enrollment for Students in Special Education for the 2014-2015 School Year.....	88

List of Figures

Figure 3.1 Inferential Statistical Procedure Setup for Relationships Between Career Academies Enrollment of African American Male Students Enrollment vs. Completion Rates.....	60
Figure 3.2 Independent Samples T-test Setup for Attendance Rate and Grade Point Average.....	61
Figure 3.3 Pearson Chi-Square Setup for Correlation between Dropout Rates of African American Male Students Enrolled in Career Academies vs. African American Males Not Enrolled in Career Academies	63

Chapter 1

Introduction

The term *averaged freshman graduation rate (AFGR)* refers to the percentage of public high school students who graduate on time (National Center for Educational Statistics, 2014). In this instance, the term “on time” means that a student graduates four years after starting 9th grade with a regular high school diploma. Graduating with a regular high school diploma means that the student has met or exceeded the coursework and performance standards for high school graduation established by a state or other relevant authority (National Center for Educational Statistics, 2014).

Reports from the Common Core of Data in 2009 indicate that across the United States and the District of Columbia a total of 3,039,015 public school students received a high school diploma (Stillwell, Sable, Plotts, & National Center for Education Statistics (ED), 2011). While this number of high school graduates may seem promising, it calculates to a 75.5 % AFGR nationwide, indicating that nearly 25% of America’s students became dropouts between 2005 and 2009. The *Fourth Annual Update on America’s high schools* shows that many school districts are making gains in graduation rates and putting more kids on a college and career ready path (Balfanz et al., 2013). The *Fourth Annual update* also shows that for the first time the nation is on track to meet the goal of a 90% high school graduation rate by the class of 2020 (Balfanz et al., 2013).

As previously stated, approximately 25% of America’s students drop out of high school which indicates that there is pervasive issue facing both schools and society at large. The dropout issue is even more pervasive as it relates to minority students. The overwhelming number of minority students that are still not earning high school diplomas

is indicative of the work to be done in terms of narrowing the progress gap between minority students and their counterparts. In 2008, Asian/Pacific Islanders were reported as having the lowest dropout rate at 2.4% followed by White students at 2.7% (Stillwell et al., 2011). The four-year graduation rate is still 66% or less for African American students in 20 states and for Hispanic students in 16 states (Balfanz et al., 2013). There are no states in which the graduation rate for white students is below 66% and only four states in which it is 75% or less (Balfanz et al., 2013).

The Texas Education Agency (TEA) reports that males continue to exceed the state percentages for dropouts. In 2012 the state dropout rate was 2.4% for all students and 3.8% for African Americans (Texas Education Agency, 2012). During the 2012-2013 school year alone approximately 355, 000 African Americans dropped out of school in Texas. If this trend continues, then close to half a million African Americans would drop out in less than four years.

In addition to the disparity between the dropout rates for African Americans and their counterparts, there is also disparity by gender. The Texas Education Agency reports that the females in the Class of 2014 grade nine cohort had a higher four-year graduation rate, 90.4 percent, than males, 86.3 percent (Texas Education Agency). This is also true for African American males. According to the U.S. Department of Education National Center for Education Statistics black males also had higher status dropout rates than their female counterparts, 10.6 vs. 8.1 percent respectively (National Center For Education Statistics).

It is evident that there is work to be done to increase the level of engagement of African American male students and to provide them with a career-focused pathway

while in high school. In an effort to provide African American male students with high school experiences that link learning to real world experiences thereby increasing their level of engagements, career academies emerged. Career academies are usually schools within schools in which both academic and vocational curriculum are integrated, centering upon a career theme (Castellano & Stringfield, 2002). The purpose of this study is to determine the differences that exists between the attendance rates, grade point averages and dropout rates amongst African American male students enrolled on career academies and those that are not enrolled on career academies. As such the concepts of career academies will be deeply explored throughout this chapter as well as subsequent chapters. The remainder of this chapter will discuss the statement of the problem, a review of the historical significance of the African American male dropout rate and attempted interventions, a definition of terms, a review of the methodology and data collection methods, the research questions, the limitations of the study, and a summary of the chapter.

Historical Significance of Dropout Rates for African American Males

African American males in urban school systems are disproportionately experiencing negative school outcomes, including: academic failure, high dropout rates, low graduation rates, low test scores, low grade point averages, low representation in gifted education and Advanced Placement classes, and excessively high participation rates in special education (Ford & Moore, 2013). Paired with these negative school outcomes are low academic motivation, engagement, and interest among African American males of all ages and academic levels (Ford & Moore, 2013).

The Dean Alienation Scale was administered to 1,064 high school students to determine differences in feelings of alienation as it relates to school. African Americans, especially males, reported feeling higher levels of alienation than the other ethnic groups (Calabrese & Poe, 1991). In a study conducted by Calabrese and Poe (1991) of high school graduates, participants identified several key factors that they felt contributed to their high school completion. These factors included (a) having a mentor or parent that supported them, (b) having teachers that set high expectations, or (c) involvement in extracurricular activities.

An apparent disconnect exists between African American students and the school setting. It is imperative that leaders in education as well as government officials work together to ensure that systems and policies that support the educational advancement of African American males are adopted and embraced in educational settings.

Governmental Interventions and Regulations

Many educational initiatives, such as No Child Left Behind enacted in 2002, were designed to increase success amongst minorities did just the opposite. While schools were held more accountable for their work with minority students and closing the achievement gap, their methods were not successful as it pertains to better engaging African American students. Over a seven-year period of time, Wilkins (2008) conducted an analysis of the accountability policy for a major urban school district was conducted to include an analysis of test data for 271,000 students. Findings from this study (Wilkins, 2008) revealed that analyzing data by race did not lead to higher test scores, but it in fact led to the most at-risk students being pushed out of their schools so that the schools could

avoid negative accountability ratings (Wilkins, 2008). Of the 271,000 students that were followed, dropout rates were the highest for African America and Latino students (Wilkins, 2008). Additionally, the 2013 annual update on the high school graduation crisis revealed that although there have been some gains in graduation rates there has not been an evenly distributed climb in rates amongst ethnic groups (Balfanz et al., 2013). Therefore, it is necessary to focus on closing this gap amongst the negatively impacted minority groups.

An examination of the accountability measures adapted by the state of Texas, which later served as a model for the No Child Left Behind Act, revealed that over 135,000 students are lost from Texas high schools each year (Wilkins, 2008). High stakes accountability requires students to perform successfully on numerous state and national tests. High stakes testing has not led to equitable education amongst ethnic groups, by contrast, it has led to further disparities between achievement levels and high school completion levels.

The Emergence of Career Academies and the Implications for African American Male Students

There have been many school reform efforts since the 1980's that were designed to equip schools to ensure greater equity in the educational process which would in turn lead to higher graduation rates and higher numbers of college and career ready graduates. These reform efforts included emphasis on the engagement of African American students in school.

One of the major reform efforts that has taken place is the emphasis on Career and Technical Education and the establishment of Career Pathways or Career Academies.

Student outcomes for 18 cohorts of career academy students were examined to include an analysis of attendance, grades, and graduation status. In comparison to the students who were not enrolled in the career academies at the same schools, the career academy students had higher first-year grade point averages, better attendance rates, and higher four-year graduation rates (Elliott, Hanser, & Gilroy, 2002). The California Center for College and Career Readiness, along with ConnectEd, developed a model for career pathways that is referred to as linked learning.

The linked learning model was designed to meet the needs of students who were feeling bored, disengaged, or unchallenged by the traditional school setting (Studier & ConnectEd: The California Center for College and Career, 2008). The model also requires that the career academies admit students who are at risk due to socioeconomic status, attendance issues, or low achievement scores (Studier & ConnectEd: The California Center for College and Career, 2008). In career academies, students choose career pathways that interest them and are exposed to real world experiences that help prepare them for college and careers. Career academy courses combine academic and technical learning so that students are given to apply their learning to the real world. Students enrolled in California's linked learning academies are more likely to pass the California High School Exit Exam as sophomores, more likely to complete the requirements needed for admission to California's public universities, and they are more likely to graduate from high school (Studier & ConnectEd: The California Center for College and Career, 2008).

Other career and technical education reform efforts have also reported positive impacts on at risk students. There are eight essential features of the linked learning model

that must be present in order to effectively meet the needs of potential dropouts (Castellano, Stringfield, Stone, & National Dissemination Center for Career and Technical Education, 2002):

1. Tech prep- Provided in specific vocational fields and taken in sequence
2. Curriculum Integration – Core and career teachers must work together to expose students to real world experiences and make learning relevant
3. Work-Related Experience – Students must spend ample time in a lab or completing internships
4. Students must be placed on a clear school to work path, to include industry certifications
5. High expectations and rigorous academics
6. Career Academies – Academic and vocational curriculum integrated around career themes
7. Career Pathways – Students are to choose a pathway and follow the course sequence until graduation

Initiatives that integrate a connection to real world experiences and learning communities that use a project-based approach to teaching have reported (a) higher graduation rates, (b) higher achievement on state tests, and (c) higher grade point averages (Studier & ConnectEd: The California Center for College and Career, 2008).

Definition of Terms

Several terms were used within this research study that may not be easily understood by those that are not affiliated with educational institutions. As a result, each of the following terms was used operationally in this study.

1. Averaged freshman graduation rate - The percentage of public high school students who graduate on time. A student graduates 4 years after starting 9th grade with a regular high school diploma

2. Career Academies - Classes that integrate academic instruction, technical instruction and actual field/career experiences for students.

3. Career Pathways - Courses that are taken in sequential order that lead to mastery or certification in a particular industry.

4. Common Core - The Common Core State Standards Initiative is an educational initiative in the United States that details what K–12 students should know in English language arts and mathematics at the end of each grade. The initiative on seeks to establish consistent educational standards across the states.

5. Common School Movement - This movement was the starting point for education in America; it allowed free education for all children in the United States.

6. Critical Race Theory (CRT) - CRT is an academic discipline focused upon the application of critical theory, a critical examination of society and culture, to the intersection of race, law, and power.

7. Dropout rate - The percentage of young adults' ages 16 through 24, of a noninstitutionalized population, who were enrolled in a high school program and left without receiving a high school diploma or obtaining an equivalency certificate.

8. Elementary and Secondary School Act of 1965. The act was passed as a part of President Lyndon B. Johnson's "War on Poverty". The act is an extensive statute that funds primary and secondary education. It also emphasizes equal access to education and establishes high standards and accountability. In addition, the bill aims to shorten

the achievement gaps between students by providing each child with fair and equal opportunities to achieve an exceptional education.

9. Graduate - A student who has received a high school diploma or obtained an equivalency certificate after completing 4 years of a high school program.

10. No Child Left Behind Act - The federal legislation that was adopted in 2002 that ensures that all states and school districts are accountable for the success of the students.

This definition of terms will assist with providing clarity around the definition of a dropout, the concept of graduating on time and the criteria that must be met in order for a student to be considered a graduate. These terms will also provide clarity surrounding federal and state regulations that impact student achievement as well as high school completion.

Research Design

Employed in this empirical investigation was a comparative research design (Johnson & Christensen, 2008). In this empirical, quantitative investigation, four years of already existing data were obtained and analyzed herein. As such, the use of archival data constitutes a comparative research design for this investigation. The independent variable of enrollment or non-enrollment in a career academy had already occurred for the African American males whose data were obtained and analyzed. The dependent variables of attendance rates, GPAs, and dropout rates had already occurred, as well. Moreover, no extraneous variables were controlled due to the use of pre-existing data (Johnson & Christensen, 2008).

Data Analysis

A random sample of 641 African American male students who entered high school in the fall of 2011 was generated. Of the 641 students, some of the students were enrolled in career academies and some were not. These students were not identified by name; they were given a number to be used as a unique identifier. Each student was labeled to indicate whether they were enrolled in a career academy or not. The data set also indicated whether or not the student completed high school in the spring of 2015 with their cohort.

Data was analyzed to identify the mean GPA and attendance rates for each of the four years that the participants were in high school. A t-test for each dependent variable was conducted. A table for each school year was included listing each dependent variable to report the mean differences for each participant group (those enrolled in career academies and those that are not).

A table for each school year was included listing each dependent variable to report the min, max and SD differences for each participant group (those enrolled in career academies and those that are not). A Cohen's D test was run to determine the effect size of the statistical differences in the attendance rates and GPA's for both groups.

A Pearson chi test was run for the fourth year only to determine the differences that exist in the graduation rates for those that are enrolled in career academies and those that are not. This data will also be presented in a table.

Research Questions

The research will address the following questions:

1. What is the difference in attendance rates between African American males who were enrolled in a career academy and African American males who were not enrolled in a career academy for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?
2. What is the difference in GPAs between African American males who were enrolled in a career academy and African American males who were not enrolled in a career academy for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?
3. What are the demographic characteristics of African American males whose data were analyzed in this multiyear investigation, with respect to the categories of at-risk and special education for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?
4. Is there a statistical difference between dropout rates of African American male students enrolled in career academies and African American males who were not enrolled in career academies?

A series of descriptive statistics will be analyzed to determine the relationship among variables. A spreadsheet for each year beginning with 9th grade and continuing through 12th grade will be developed for the participants that will include all previously described variables. The excel spreadsheet will be converted to an SPSS file in order to complete the data analysis.

Limitations

The use of t-tests when analyzing quantitative data does not allow for controls as it relates to other variables that could contribute to attendance rates, GPA's and dropout rates. Educational issues are often more complex than just simply determining if differences exist. These complex issues often require the use of qualitative data to include personal and situational experiences of participants.

Many factors impact dropping out of school. It is difficult to narrow this occurrence to one specific variable without controlling other variables such as family support, involvement in extracurricular activities, and intrinsic motivation. These factors may impact a student's commitment to completing high school as well.

One other factor to consider is the process for choosing students to participate in the career pathways. If enrollment in the career academies requires an application and certain academic criteria to be met, then student participants are probably likely to possess a strong work ethic regardless of enrollment in a career pathway. Additionally, this study does not include an analysis of outcomes based on particular career pathways.

There is sufficient literature to support career academies and the linked learning model and its impact on student achievement; however, limited literature is available that directly examines the link between African American male students and participation in a linked learning model.

Summary

While research has shown positive academic gains for overall schools, there has been no research conducted to determine the impact of the linked learning/career pathway approach specifically on African American high school students' dropout risk. Since

African American dropout at a far higher rate than Caucasian and Asian students, there is a need to identify successful dropout prevention methods for this particular subgroup.

Chapter 2

Literature Review

Introduction

The review of literature examines the dropout rates for African American males and school reform efforts to include Career Pathways or Career Academies. The purpose of this review is to identify and discuss research studies and related literature regarding the causes of dropout for African American males and efforts to minimize these factors. The literature review concentrates on the following topics: (a) the historical context for dropout rates for African American males, (b) De Facto Segregation and progressive transition to integration, (c) intervening governmental regulations, (d) Critical Race Theory (CRT), (e) The Critical Race Theorist's depiction of the Brown vs. Board of Education decision, (f) The CRT Perspective on the Disenfranchisement of African American Males in Schools, (g) Socioeconomic and Cultural Implications for African American Male Dropouts, (h) Dropout Prevention Measures through Educational Reforms for African American Males, (i) the emergence of career academies and the implications for dropout rates, and (j) a summary of the literature.

Historical Context for Dropout Rates for African American Males

Pioneered in the early 1800's, the Common School Movement sought to provide free, universal education for all American children. The Common School Movement was the very first attempt in the United States to provide education for all children (Rippa, 1984). Since the onset of the movement, Africans enslaved in the United States have faced challenges existing within the context of American Education. The demand for an African labor force in the South, ensued by the invention of Eli Whitney's Cotton gin,

sparked an economic development system that deemed the education of slaves an inconsequential factor to the country's economic agenda (Rippa, 1984). With few exceptions, African Americans remained illiterate largely due to the fact that efforts to teach them to read were discouraged. In fact, most of the southern states did not permit the instruction of reading to slaves. White Americans especially feared slaves who could read, since literate African Americans led insurrection in the 1820's and 1830's (Rippa, 1984).

An era of transition took place between 1865 and 1919. The shot that rang out across Charleston Harbor from Fort Sumter on April 12, 1861 set the federal garrison aflame, and for four historic years, the blaze spread, engulfing the South in a gory holocaust (Rippa, 1984). The Civil War launched an attack on America's view and destroyed the reign of the Southern Confederacy, which led to the freeing of the slaves. The first years of African American freedom were periods of great social tension, aggravated by disease, hunger, and intense suffering. The former slaves, adrift without resources, were helpless and ignorant. "Unaccustomed to freedom, they spent days and nights loitering about the community, too bewildered to understand anything except the fact that they were not bound any longer by forced labor" (Rippa, 1984, p. 126).

Leaders in charge of the reconstruction of the United States following the Civil War not only exhibited a callous disregard for destitution and human misery, they also displayed a complete ignorance of mores associated with the African American way of life. Above all, they failed to consider the attitudes of the southern people towards the former slaves (Rippa, 1984).

Therefore, the African American people, only recently freed from bondage were forced to acquiesce in the new social order of the White South. How did the African American citizens feel about their inferior status? Unfortunately, it is impossible to assess their view immediately after the Civil War, for they left no written record of what was in their hearts and souls during this tumultuous period (Rippa, 1984).

African American author and activist W.E.B. DuBois wrote often of the African American plight during this transitional period. DuBois captured the sentiments of this time period as it related to the education of African Americans with this quote:

The sincere and passionate belief that somewhere between men and cattle, God created a tertium quid, and called it a Negro, a clownish, simple creature, at times even lovable within its limitations, but straightly foreordained to walk within the Veil. To be sure, behind the thought lurks the afterthought, some of them with favoring chance might become men, but in sheer self-defense we dare not let them, and we build about them walls so high, and hang between them and the light a veil so thick, that they shall not even think of breaking through (DuBois, 1903, p. 90).

In essence DuBois attempted to shed light on the fear of educating African Americans by describing the barriers to their education as walls. Through DuBois' writing, African Americans seem to have faced extreme adversity in even realizing a portion of their potential. African Americans were purposefully kept ignorant and uneducated so that they would remain content with their lot in life.

There were several attempts to remove the barriers to education for African Americans. The veil as aforementioned by DuBois (1903) in the "Training of African

American Males” in the journal entitled the *Soul of Black Folks* can be equated to the history and evolution of education in the United States. These themes in the educational context of the veil continue to impact disenfranchised African American males that cannot surpass existing barriers in both education and the workplace.

Following the Civil War, the schools in the South, like other social institutions, were caught in this maelstrom of war and peace (Rippa, 1984). A part of this on-going war was the continuing struggle for equality of educational opportunities through legislative efforts for African Americans’ civil rights. For almost a century after the Civil War, a pattern of separate schools for African Americans was widespread even outside the South. De Facto segregation, through school districting, existed and continues to exist in many sections of the nation despite major legislative changes (Rippa, 1984).

The United States Supreme Court in *Plessy v. Ferguson* (1896) upheld a law in Louisiana that sanctioned “separate but equal” accommodations in railroad trains. “Separate” facilities and services for African Americans and for white people in transportation, public welfare, and education were ruled constitutional, provided these public facilities and services were “equal”. The separate but equal doctrine provided a legal basis for dual school systems during the first half of the twentieth century (Rippa, 1984).

World War II, in fact, brought about a change in the desire of African Americans to ascertain civil rights and equality in education. The war provided an opportunity to see past segregation in the armed forces and allow African American soldiers with new opportunities in Europe and the Far East, broadening their outlook on race relations. The soldiers would at times experience better treatment from the European soldiers. This

occurrence caused them to view race relations in the United States in a more oppressive manner. Following the war, many African American soldiers that returned detoured from the South and settled in the North, igniting an exodus of African American families to New York City, Washington D.C., Philadelphia, Detroit, and Chicago. In the North, African Americans expected, but did not always obtain, a newer dimension of life (Rippa, 1984).

With a sense of mobility and an increase in political power, African Americans also began to demand equality of educational opportunities. "Education has a symbolic significance in the Negro world," wrote Gunnar Myrdal, the Swedish social economist, whose perceptive analysis of the United States' "dilemma" won worldwide acclaim (Rippa, 1984). For the African American, educational opportunity means personal improvement and progress. In addition, Myrdal explained, "the long-range effect of the rising level of education in the Negro people goes in the direction of nourishing and strengthening the Negro protest" (Rippa, 1984). These and other changes, then, tended to break down traditional patterns of race relations and to underscore a deepening crisis in American society (Rippa, 1984).

De Facto Segregation and Progressive Transition to Integration

Nearly 60 years after the Supreme Court upheld the separate but equal laws, *Brown v. Board of Education (1954)* would be the landmark case to break the chains of De Facto segregation and begin the process of equity in education through integration. The terms equity and equality are words that cannot be used inter-changeably in regards to the disenfranchisement of African Americans in education. Throughout the years of segregation equality was defined in many sanctions that upheld the existing caste system

(Rippa, 1984). Thurgood Marshall briefed the court in *Sipuel v. Oklahoma State Board of Regents* (1948) to affirm “classifications and distinctions based on race and color have no moral or legal validity in our society.” He continued the argument by stating that there is no such thing as equality in separate education. Marshall argued that the only purpose of separate but equal education was to maintain the status quo of the caste system based upon race. He made the argument that the separate but equal standard was only in place to uphold the slave tradition, never allowing the African American to prosper past his current position. Actual equality can never be realized under this standard. "Separate " and "equal" are simply terms that cannot exist together and actually uphold a system of equality and fairness (Rippa, 1984). Equity, on the other hand, establishes a system of compensatory education that allocates additional resources and facilities to level the playing field and break down the walls established during slavery.

In exploiting racial prejudice for political advantage, certain agrarian factions in the South helped to create a psychological atmosphere that encouraged, during the next two decades, the enactment of “Jim Crow” legislation and the disenfranchisement of African Americans by state laws (Rippa, 1984). The earlier “Black Codes,” the terroristic Ku Klux Klan, and some legalized schemes of disenfranchisement gradually forced the southern African American into a state of economic peonage and soon underscored a social inferiority almost as glaring as the abolished institutions of slavery. Every change would have to adjust to the southern biracial scheme, a heavy restriction not likely to encourage a creative thinker to move along unexplored paths. Thus, the emerging pattern of race relations strengthened the status quo and reinforced a rigid conservatism in educational thought (Rippa, 1984).

Interventive Governmental Regulations

Governmental attempts to provide equity in education date back to the 1960's. Legislation continued in the pursuit of equity with President Lyndon B. Johnson and his enactment of the Elementary and Secondary Education Act (ESEA) of 1965 as a part of his "War on "Poverty" platform (United States Department of Education, 2015). The goal of the ESEA was to improve the country's system to academically compete on a global scale by enhancing the educational experiences of all children to include the poor and underserved. The ESEA was developed under the principle of redress, which established that children from low-income homes required more educational services than children from affluent homes. As part of the Elementary and Secondary Education Act, Title I Funding allocated 1 billion dollars a year to schools with a high concentration of low-income children (United States Department of Education, 2015).

President Johnson believed that equal access to education was vital to a child's ability to lead a productive life (United States Department of Education, 2015). This act created a special source of federally funded dollars that were referred to as Title One funds that were to be used specifically to provide resources to meet the needs of educationally deprived children (United States Department of Education, 2015).

It is important to note that the ESEA of 1965 was enacted during the height of the Civil Rights Movement. Civil Rights leaders were extremely vocal about the disparities between the resources provided for non-white students versus those provided for white students. Although earlier legislation deemed educational segregation attempts unconstitutional there was still obvious disparity between what should have been equal resources.

Civil Rights leaders pressured President Johnson to take action. Johnson decided to respond to Civil Rights pressures and religious conflicts over education by linking educational legislation to his "War on Poverty"(United States Department of Education, 2015). Following the enactment of the bill, President Johnson stated that Congress, which had been trying to pass a school bill for all America's children since 1870, had finally taken the most significant step of this century to provide help to all schoolchildren. He argued that the school bill was wide-reaching, because "it will offer new hope to tens of thousands of youngsters who need attention before they ever enroll in the first grade," and will help "five million children of poor families overcome their greatest barrier to progress: poverty." (Johnson, 1965, p. 407). He also contended that there was no other single piece of legislation that could help so many for so little cost: "for every one of the billion dollars that we spend on this program, will come back tenfold as school dropouts change to school graduates" (Johnson, 1965, p. 407). The ESEA had at least three major consequences for future legislative action. First, it signaled the switch from general federal aid to education towards categorical aid, and the tying of federal aid to national policy concerns such as poverty, defense, and economic growth. Second, it addressed the religious conflict by linking federal aid to educational programs directly benefiting poor children in parochial schools, and not the institutions in which they enrolled. Third, the reliance on state departments of education to administer federal funds (promoted to avoid criticisms of federal control) resulted in an expansion of state bureaucracies and larger involvement of state governments in educational decision-making (United States Department of Education, 2015).

Although greater attempts to provide equity in the educational experiences of all children were made due to the enactment of the ESEA of 1965, African American male students continued to lag behind their white counterparts. In 1971, the average reading proficiency among 17-year-old African American males was well below that of 17-year-old Whites males. Research demonstrates that the average reading proficiency of African American males was well below that of 13-year-old whites (*The Condition of Education, 1994*). The research revealed that not only were there disparities in the reading levels of African American males and White males in the 1970's, there were also disparities in the dropout rates for these two groups of students (National Center for Educational Statistics, 1994). According to the National Center for Educational Statistics (1994), the dropout rate for African American males was 21% in 1972 compared to 12% for White males. This data implies that even with the changes in education under the ESEA, equality did not exist for African American male students.

Further attempts to narrow the achievement and graduation gaps continued. The No Child Left behind Act (NCLB) is an example of one such attempt. The No Child Left Behind Act of 2001 is a United States Act of Congress that serves as the reauthorization of the Elementary and Secondary Education Act, which included Title I, the government's flagship aid program for disadvantaged students (United States Department of Education, 2015). NCLB continued to provide federal aid; however, NCLB support was based on the premise that setting high standards and establishing measurable goals can improve individual outcomes in education (United States Department of Education, 2015).

The NCLB Act required states to develop assessments in basic skills. To receive federal school funding, states must give these assessments to all students at select grade levels. NCLB expanded the federal role in public education through annual testing, annual academic progress, report cards, teacher qualifications, and funding changes (United States Department of Education, 2015).

Many educational initiatives, such as No Child Left Behind, were designed to increase success amongst minorities; however, they did just the opposite. The National Center for Education Statistics (2004) reported on the characteristics of high school completers and high school dropouts. According to the latest data collected:

1. Five out of every 100 young adults enrolled in high school in October 1999 left school before October 2000 without successfully completing a high school program.
2. Over the last decade, between 347,000 and 544,000 10th through 12th grade students left school without successfully completing high school.
3. The dropout rates for Whites in 2000 remained lower than the rates of African Americans. (National Center for Education Statistics, 2004)

While schools were held more accountable for their work with minority students and closing the achievement gap, their methods were not successful as it pertained to better engaging African American students. Over a seven-year period of time, an analysis of the accountability policy for a major urban school district was conducted (Wilkins, 2008). The research included an analysis of test data for 271,000 students. Findings from this study revealed that analyzing data by race did not lead to higher test scores, but it in fact led to the most at-risk students being pushed out of their schools so that the schools

could avoid negative accountability ratings (Wilkins, 2008). Of the 271,000 students that were followed, dropout rates were the highest for African American and Latino students (Wilkins, 2008). Additionally, the 2013 annual update on the high school graduation crisis revealed that although there have been some gains in graduation rates, there has not been an evenly distributed climb in rates amongst ethnic groups (Balfanz et al., 2013). Therefore, it is necessary to focus on closing this gap amongst the negatively impacted minority groups.

According to Wright and Fitzpatrick (2004), low-income African American youth are more likely than Hispanic or Caucasian youth to reside in poor neighborhoods. There are several factors associated with living in poor neighborhoods that include (a) premature exposure to violence and crime, (b) isolation from good role models, and (c) lack of good employment opportunities (Wright & Fitzpatrick, 2004).

The most current educational reform movement, the Common Core, placed into effect in 2009, seeks to establish the framework for equity in preparing students for college and career readiness. This initiative is built on the desire to anchor primary and secondary education across the United States in one set of demanding, internationally benchmarked standards. Thus, all students will be prepared for further learning and work in a competitive global economy regardless of the socio-demographic variation associated with their “zip code,” the location of their neighborhood, or school (Kornhaber, Griffith, & Tyler, 2014).

Leaders from educational policy groups began promoting the need for a common set of rigorous standards both to advance equity and to help prepare students for an economy that was blind to state and international borders. The leaders of the Common

Core hold several aims. By grounding education in the reform's rigorous, internationally benchmarked standards, students and the nation will be prepared to compete in the global economy (Kornhaber et al, 2014). These standards will also enable students to graduate high school ready to pursue college or career education without need of remedial coursework. In addition, the Common Core standards will provide teachers and parents with a clear understanding of what students are expected to learn no matter where students live or what school they attend. On one hand, the Common Core represents a potential change in the highly fragmented, decentralized system of U.S. education (Kornhaber, et al., 2014). These reforms seek to improve teaching, learning, and equity by making the education system more coherent (O'Day & Smith, 1993).

Fueled by governmental sanctions, growing research emerged in an attempt to respond to the need for the advancement of all students. African American students, the subgroup of students that were originally denied the opportunity to obtain an education, had now become a consideration based in part by their value to the ever-changing workforce (O'Day & Smith, 1993). Consistent with this effort, Dropout Prevention became a target of the political agenda in the mid 1980's. Since 1986, the National Dropout Prevention Center/Network has conducted and analyzed research, sponsored extensive workshops, and collaborated with a variety of practitioners to further the mission of reducing school dropout rates by meeting the needs of youth in at-risk situations, including students with disabilities (national dropout prevention center network). The National Dropout Prevention Center has identified 15 effective strategies that have the most positive impact on the dropout rate. Among these effective strategies are: (a) School-Community Collaboration, (b) Safe Learning Environments, (c)

Mentoring/Tutoring, Service-Learning, (d) After-School Opportunities, (e) Active Learning, Educational Technology, (f) Individualized Instruction, and (g) Career and Technology Education.

The federal government developed an accountability system in 2001 under the No Child Left Behind Act that factored dropout rates into determining whether a school met federal standards (United States Department of Education, 2015). Consequently, both state and local governing agencies began to develop comprehensive dropout prevention programs aimed at reducing and preventing the number of dropouts.

In 2003, the Texas House of Representatives approved House Bill One that appropriated \$60 million for High School Completion and Success programs, which supported the development and implementation of high school reform models (Texas Education Agency). In 2007, Texas House Bill 2237 increased funding to \$104 million for high school completion and success and established several dropout prevention and recovery programs. House Bill 2237 also imposed increased levels of responsibility for schools that exhibited high dropout rates. Districts and charter schools with high dropout rates were required to develop and submit dropout plans for TEA approval specifying how they intended to use Compensatory Education and High School Allotment for dropout prevention efforts.

Although much work has been done in the area of dropout prevention and recovery, there is still much work to be done as it pertains to incorporating programs and initiatives that inspire African American students to attend school consistently and to graduate, in many states only about 60% of African American students graduate from high school (Steinberg et al., 2004). In Texas alone African American males continue to

exceed the state percentages for dropouts. In 2012, the state dropout rate was 2.4% for all students and 3.8% for African Americans. In 2013, the state dropout rate for all students was 2.2% while the rate for African Americans was 3.3% (Texas Education Agency, 2012).

Researchers attempting to understand the phenomenon of the dropout crisis administered surveys to parents, teachers, administrators, and students to analyze their perceptions on the causes and solutions to the dropout challenge. The survey results revealed great disparity amongst school personnel and student perceptions (Bridgeland, 2010). Young people who drop out saw boredom as the most significant cause while educators did not see boredom as a factor at all (Bridgeland, 2010).

When asked directly what they thought would help improve their chances to stay in school, dropouts cited more opportunities for real-world learning, such as internships, service-learning, and job shadowing, to make what is learned in the classroom more relevant to their lives (Bridgeland, 2010). They longed for better teachers who kept classes interesting and more personal instruction from teachers who knew their names and their interests.

Despite all of these efforts to level the playing field in education and impose high standards for all, there is significant data that suggests that there is a decline in the graduation rates and an increase in the dropout rates of African American male students. It is imperative that educational leaders as well as classroom teachers work to raise the level of expectations for African American males. According to Carroll (1993), research indicates that high expectations for teachers positively affect the success of their students.

In order for educators to set high expectations, there must be a belief that African American males can achieve these expectations.

Ensuring that African American male students reach their academic potential requires a social justice approach in which school leaders and educators advocate for the rights of African American male students (James & Moore, 2013). Research suggests that the attitude of those in the education system towards African Americans is another factor that contributes to the problem of lower attainment and high dropout percentages (Carroll, 1993). Consequently, educators must believe that African American male students can achieve and that they deserve equal access to the privileges that being educated affords.

Critical Race Theory

Overwhelming evidence suggests that African American males are being underserved in schools across the United States (Ford & Moore, 2013). Despite systematic efforts to finance programs and initiatives to prevent dropouts, these resources have not proven effective as it relates to preventing African American males from dropping out of high school. The disparities between the dropout rates and overall school performance of African American males and their counterparts present the need to understand and respond to this phenomenon. While the Critical Race Theory will not be used as the framework for this study, it will serve as a guiding principal as the dropout rates for African American males is further explored (Crenshaw, et al., 1995).

Cole (2012) describes the origins of Critical Race Theory (CRT) as a counter to Critical Legal Studies (CLS). CLS was founded in the United States in 1976 at the Conference on Critical Legal Studies and was comprised of a group of law teachers,

students, and some practitioners loosely organized as activists. Its birth was a response to its perception of the role of the law in protecting hierarchy and class (Cole, 2012). In attorney Kimberlé Crenshaw's words, "CLS aimed to expose and challenge the ways American law served to legitimize an oppressive social order" (Crenshaw et al., 1995).

CRT emerged partly as a response to a belief that CLS analyses were too class based and underestimated race, which for critical race theorists is the major form of oppression in society. As Crenshaw, et al. (1995) explain, CRT emerged in the interstices of the political and institutional dynamic created by the disintegration of the center ground, and represented an attempt to inhabit the space between two very different ideological and intellectual formations. First, CRT was a reaction to CLS, criticizing CLS for its emphasis on class and economic structure, and its failure to come to terms with the particularity of race (Crenshaw et al., 1995). Consistent with this thinking, Cornel West, the African American professor and activist, states, "CLS writers deconstructed liberalism, yet seldom addressed the role of deep-seated racism in American life" (Crenshaw et al., 1995). By not fully addressing the race issue, CLS could not solve the problems with the social order; no real change could come about.

Second, CRT sought to stage a simultaneous encounter with the exhausted vision of reformist civil rights scholarship. Critical race theorists believed that while civil rights reforms were impactful, they did not address the constrictive role that racial ideology plays in the culture and composition of American institutions (Crenshaw et al., 1995). Two of CRT's major premises are the aforementioned centrality of race over class, and the concept of white supremacy as a descriptor of reality for the everyday experiences of people of color rather than its limited usage to describe only extremist groups such as the

Ku Klux Klan (Cole, 2012). In this vein it is implied that white supremacy can be experienced within the constructs of any given institution, including an educational institution.

In order to understand the fight for equality, CRT theoretically lays the foundation of the historical context and dropout rates for African American males in traditional programs. CRT has its roots in the fields of anthropology, sociology, history, philosophy, and politics and emerged as a formal body of scholarship in the mid-1970s (Crenshaw et al. 1995; Delgado and Stefancic 2001). CRT gained broad acceptance in the legal profession in the 1990s, and its evolution has been well documented (Crenshaw et al. 1995; Delgado and Stefancic 2001). Relevant ideas regarding race as a social construction that undergirds CRT can be found in the writings of classic scholars including Du Bois and Weber (Du Bois 1899; Du Bois 1903; Weber 1930). According to Delgado and Stefancic (2012), the basic tenets of Critical Race Theory are as follows:

1. **Ordinariness:** Racism is endemic. It is a part of everyday life, woven into the very fabric of the society. There is nothing abnormal about the experiences of people of color in this country. Racism cannot truly be address because it is not wholly acknowledged. Only the most barefaced forms of discrimination are ever addressed, often leaving the more inconspicuous forms to be maintained. The color-blind conception of equality calls only for "the same treatment across the board", but does not hold a solution for cases of microaggressions.
2. **Interest Convergence:** compounding the ordinariness of racism is the lack of desire to truly fix the problem. The system of racism is a system that works to

advance the interests of certain sectors of the population, mainly elite Whites and working-class Whites. Eradicating racism goes against their self-interests and is therefore undesirable. Take for example the landmark Civil Rights victory that was *Brown v. Board of Education*. The outcome of this case may have had more to do with the self-interests of Whites than the advancement of African Americans.

3. **Social Construction:** race is an invention of society and not of any inherent biological or genetic fact. Scientifically speaking, race is not what defines humanity. The physical differences between each race only accounts for a very small portion of the variation in the genetic code. Race is maintained as a social construction because society consciously and subconsciously decide to ignore the scientific similarities among the races and instead focus on the physical differences.
4. **Differential Racialization:** emphasis on racial differences are enforced as the needs of the dominant society changes. American society has a push-and-pull relation with the depictions of its minority groups. When one group serves a purpose to the society, as in times of war and construction, the stereotypes used for that particular group changes. The changes in stereotypes happen as the needs of the labor market changes.
5. **Intersectionality and Antiessentialism:** the idea that personal identity is fluid and multidimensional. No person has a single identifier. An African American female may be a womanist, lower-middle class, and gay. A working-class white male may be a Democrat, Republican, or student. All of these factors

work to inform the identity of each person. At times the identities might overlap or conflict.

6. Unique Voice of Color: this thesis holds the idea that minority writers and thinkers are the authority of their particular experiences and oppressions that are able to communicate with their white counterparts. They are able to competently discuss the nuances of the oppressions that the Whites are unable and unlikely to know. A White person does not, and cannot fully, know what it is to be an African American, Latino/a, Asian, or American Indian. It is left to minority writer to help bridge the gap. (Delgado & Stefancic, 2012)

One of the key assumptions undergirding CRT is that racism is more than just unconnected isolated acts by individuals but is endemic to American society, embedded in the legal, cultural, and psychological spheres. Harris (1993) describes how property rights have served as an especially critical vehicle by which institutional racism is perpetuated. She introduces the notion of property rights in whiteness to explain the apparent entrenched pattern of racial inequality (Harris, 1993). Harris argues, “the law has recognized and codified racial group identity as an instrumentality of exclusion and exploitation while refusing to recognize group identity when asserted by racially oppressed groups as a basis for affirming or claiming rights” (Harris, 1993, p. 1761). This process, according to Harris (1993), has created a de facto “property right in whiteness” protected by limiting the type of relief available to oppressed groups. Harris (1993) further suggests that protection of the property interest in whiteness is achieved, in part, by treating race as “immutable and biological” and by “treating whiteness as the basis for a valid claim to special constitutional protection.”

Critical Race Theorist's depiction of the Brown vs. Board of Education Decision

In examining legal documents that addressed desegregation in schools, Monaghan (1993) argues that, given the absence of neutrality and objectivity in the legal system, CRT proponents must insist that legal doctrines be reformulated to reflect the interests of the oppressed, thereby demolishing “separate but equal” practices according to class. According to Delgado and Stefancic (2001), this reformulation should include a critique of existing civil rights legislation as flawed efforts to overturn racial hegemony; therefore, alternative sources must be interrogated, e.g., stories and first-person accounts to produce the types of counter-narratives that can effectively neutralize the dominant narrative.

The basic tenets of CRT were embraced by various scholars in education since the 1990s (Ladson-Billings and Tate 1995; Tate 1997; Ladson-Billings 1998; Solórzano and Yosso 2002; Dixson and Rousseau 2006; Edward et al. 2009). Ladson-Billings and Tate (1995) argue the critical role of property rights, as highlighted by Harris (1993), asserting: “In the simplest of equations, those with ‘better’ property are entitled to ‘better’ schools” (p. 53-54). By the mid-1990s, according to Gloria Ladson-Billings (2005), legal scholars had written more than 300 leading law review articles and a dozen books on CRT. It was around this time that CRT entered educational theory. Cementing the pivotal relationship between CRT and law, a pioneering article by Ladson-Billings and Tate (1995) traced the development of what they refer to as the Property Issue in the United States. This they note to be a defining feature of society encompassing a sequence of exploitative events, which began with the removal of Native Americans from the land, continued through military conquest of the Mexicans to the construction of Africans as

property. Ladson-Billings and Tate (1995) begin by stating that racism is endemic and deeply ingrained in American life and that the cause of African-American underachievement is ‘institutional and structural racism’ (Ladson-Billings & Tate, 1995). They argue that segregation continues in U.S. schools with African-American and Latina/Latino students still faring poorly as compared with white students. Billings and Tate argue that the dominant group justifies its power with stories that construct reality in ways to maintain their privilege (Ladson-Billings & Tate, 1995).

For example, *Brown v. Board of Education* was cited as an opportunity to allow African American students access to schools that were within their communities, and in most cases equipped with resources that the acclaimed schools of equality did not possess. Learners educated under the established “separate but equal” system in many cases had to travel miles and pass schools due to decisions established in *Plessy v. Ferguson* (Ladson-Billings & Tate, 1995). Therefore, the implication of CRT “property right in whiteness” renders implications for continued de facto segregation and inequality. In addition, African Americans would not receive the blanket right to vote until the Civil Rights of Act of 1964, which would allow the power in decision making to afford opportunities and substantiate growth. On the contrary, African Americans were abiding within a system established to keep their status and social class from being upwardly mobile in an evolving economic society. The term equity in education consists of an upheaval to level the playing field academically and afford accessibility to resources along with pre-existing equality measures.

Bell (1980) argued that civil rights advances for African Americans always seem to coincide with changing economic conditions and the self-interest of elite whites.

Sympathy, mercy, and evolving standards of social decency and conscience amounted to little, if anything. Audaciously, Bell (1980) selected *Brown v. Board of Education*, the crown jewel of U.S. Supreme Court jurisprudence, and invited his readers to ask themselves why the American legal system suddenly, in 1954, opened up as it did. The NAACP Legal Defense Fund had been tenaciously litigating school desegregation cases for years, usually losing or, at best, when a narrow victories. In 1954, however, the Supreme Court unexpectedly gave the NAACP everything they wanted. Bell hypothesized that world and domestic considerations, not moral qualms over the African American plight, precipitated the path-breaking decision. By 1954 the country had ended the Korean War; the Second World War was not long past. In both wars, African American service members had performed valiantly in the service of democracy. Many of them returned to the United States, having experienced for the first time in their lives a setting in which cooperation and survival took precedence over racism (Bell, 1980). They were unlikely to return willingly to regimes of menial labor and social vilification. For the first time in years, the possibility of mass domestic unrest loomed.

Bell's (1980) article evoked outrage and accusations of cynicism. Many years later, however, legal historian Mary Dudziak (1980) carried out extensive archival research in the files of the U.S. Department of State and the U.S. Department of Justice. She analyzed foreign press reports, as well as letters from U.S. ambassadors abroad, all showing that Bell's intuition was correct. When the Justice Department intervened on the side of the NAACP for the first time in a major school desegregation case, it was responding to a flood of secret cables and memos outlining the United States interest in improving its image in the eyes of the third World (Delgado & Stefancic, 2012).

During that period, as well, the United States was locked in the Cold War, a titanic struggle with the forces of international communism for the loyalties of uncommitted emerging nations, most of which were African, brown, or Asian. It would ill serve the U.S. interest if the world press continued to carry stories of lynchings, Klan violence, and racist sheriffs (Bell, 1980). It was time for the United States to soften its stance toward domestic minorities. The interest of whites and African Americans, for a brief moment, converged (Bell, 1980).

Consistent with the CRT's critique of civil rights legislation, the Ladson-Billings and Tate's (1995) critique of *Brown v. Board of Education's* strategy for promoting school desegregation, and Bell's (1980) critique of the Brown decision, students of color continue to be victims of social constructs designed to promote white supremacy. Critical Race theorists disavow the value of "multi-cultural" educational interventions, declaring: "as CRT scholars we unabashedly reject a paradigm that attempts to be everything to everyone and consequently becomes nothing for anyone, allowing the status quo to prevail" (Ladson-Billings & Tate 1995, p. 62). Critical Race theorists seek to align their scholarship and activism with the philosophy of Marcus Garvey, who believed that the Black man was universally oppressed on racial grounds, and that any program of emancipation would have to be built around the question of race first" (Ladson-Billings and Tate 1995, p. 62). Further, Solórzano and Yosso (2002) emphasize that a critical race methodology creates opportunities to conduct research grounded specifically in the experiences and knowledge of people of color. They describe how to compose counter-stories and provide examples of how such stories can be used as theoretical, methodological, and pedagogical tools to challenge racism, sexism, and classism and

promote efforts to achieve social justice. The voices of the impacted subjects must be heard in order to fully understand the complexity of their plight. It is not sufficient to draw conclusions from accounts of those in positions of power or those who are not directly impacted by the ills of racism.

Howard (2008) states the following in the correlation with CRT and education: "CRT within education is an evolving methodological, conceptual, and theoretical construct that attempts to disrupt race and racism in education" (Solorzano, 1998). It enables scholars to ask the important question of what racism has to do with inequities in education in unique ways. "CRT examines racial inequities in educational achievement in a more probing manner than multicultural education, critical theory, or achievement gap theorists by centering the discussion of inequality within the context of racism" (Sleeter & Delgado Bernal, 2003). CRT within education also serves as a framework to challenge and dismantle prevailing notions of fairness, meritocracy, colorblindness, and neutrality in the education of racial minorities (Parker, Deyhle, & Villenas, 1999).

The CRT Perspective on the Disenfranchisement of African American Males in Schools

Research conducted at the Johns Hopkins University developed a method for analyzing data on individual schools that brings the reality for children in underperforming high poverty districts into focus (Balfanz, 2006). Some of the key findings based on this work were: (a) in Texas nearly a third of high school students attend high schools where graduation is not the norm; (b) in Texas, African American and Latino students were three times more likely than White students to attend a high school

where graduation is not the norm; (c) racial isolation in Texas increases the odds that a minority child will attend a high school that could be considered a “dropout factory”; and (d) in Houston, 85% of the minority students attend a low promoting high school, which means that most students are not achieving successful passage (Balfanz, 2006).

Despite recent gains from a number of students in U.S. schools, African American males continue to underachieve on most academic indices (*Teachers College Record*, 2008). CRT is a lens that enables a discourse about race, class, and gender to be the centerpiece for an analysis of African American male underachievement (*Teachers College Record*, 2008). African American males in urban school systems are disproportionately experiencing negative school outcomes, including: academic failure, high dropout rates, low graduation rates, low test scores, low grade point averages, low representation in gifted education and Advanced Placement classes, and excessively high participation rates in special education (Ford & Moore, 2013). Paired with these negative school outcomes are low academic motivation, engagement, and interest among African American males of all ages and academic levels (Ford & Moore, 2013).

There is current evidence to support the disparities in the educational experiences between African American males and their counterparts. The graduation rate for African American males in Texas was 65.7 % as compared to 81.6% for White students (*The Journal of at risk Issues*, 2010). Certain school policies still exist that set African American males on a trajectory of dropping out of school prior to obtaining their diploma (Walker, 2012). In comparison to their female and other racial group counterparts, African American males experience higher rates of grade-level retention, school suspensions, and alternative school placement (Walker, 2012). The Texas Education

Agency reports a disproportionate number of African American male students being placed in alternative schools as a disciplinary action (Texas Education Agency, 2007). Alternative schools as disciplinary placement have been linked to the negative academic and social outcomes of dropping out of school and involvement with juvenile justice systems (Bell, 2014).

Research has shown that African American students tend to demonstrate higher levels of academic mis-identification than White students (Griffin, 2002). When high levels of dis-identification occurs student are often frustrated which leads to defiant behavior, truancy, absenteeism, or complete withdrawal (Griffin, 2002).

Further researchers have documented that African American students are frequently tracked in less rigorous courses and are often taught by the least experienced teachers, both of which might negatively impact high school completion rates (*The Journal of at risk Issues*, 2010). In 2010, a study was conducted to examine the factors related to dropping out for minority male students (Bridgeland, 2010). Many dropouts cited real-world events that caused them to leave school: needing to get a job and make money, becoming a parent, or having to care for family members (Bridgeland, 2010). Others cited failing in school or missing too many days to stay on track. For almost all of them, dropping out was not a sudden act but instead a slow process of disengagement from school. The leading reason dropouts cited for their decision to leave school provided a baseline for helping more students to be further engaged to remain in school. Dropouts reported not seeing the connection between classroom learning and their own lives and career dreams. Nearly half cited “boredom” and uninteresting classes as principal reasons

for dropping out (Bridgeland, 2010). Participants perceived their learning as irrelevant to their lives and did not see the value in their classes (Bridgeland, 2010).

When viewed through the lense of the CRT, the evidence presented clearly delineates that the present American education system has done exceedingly well in continuing the tradition of failing to meet the needs of its African American students. The statistics indicate that more than class, sex, or any other identifier, race is the great divider (Ladson-Billings & Tate, 1995). The problem facing African American males in schools is a race-centered problem.

Socioeconomic and Cultural Implications for African American Male Dropouts

The number of high school students that do not earn a diploma is a serious challenge for school districts and the nation as a whole. Dropping out of high school leads to young adults being unprepared for jobs, poorly educated, trapped in poverty, and unemployment (Campbell, 2004). The U.S. Department of Labor projects that 60% of jobs created between 2010 and the present will require at least some postsecondary education (Steinberg, Almeida, & Jobs for the Future, 2004). Consequently, an individual that does not earn a high school diploma will be at risk for not being able to obtain a sustainable job. Economic hardships create social, economic, and political issues that are experienced by the entire society.

According to Woods (2004), the following consequences are likely to occur as a result of dropouts:

1. The employment opportunities will be more limited because the labor force requires more educational and technological skills.

2. Dropouts are more likely than other citizens to receive welfare and other social programs.
3. Dropouts will compete with machines and people in low-wage nations for jobs which will widen the income difference between dropouts and others with high school diplomas.
4. A growth of unskilled laborers in low-wage jobs will increase the trend toward developing a large American underclass. (Woods, 2004, p.1)

African American males continue to have higher dropout rates than their non-African American counterparts. As a result, more African American males are often unprepared for jobs, poorly educated, and trapped in poverty due to unemployment (Campbell, 2004). Conditions related to African American males continue to decline. The unemployment rate for African American males is approximately 31.9%, which is triple the national average (*Black Issues in Higher Education*, 2004). Additionally 30% of African American males under the age of 18 live below the poverty line (United States Department of Education, 2004). It is imperative that educational systems make every effort possible to graduate African American male students and place them on a path for career readiness so that they do not fall prey to the conditions associated with a lack of earning a high school diploma.

Texas schools have lost nearly two million high school students to the dropout crisis (*Education and Urban Society*, 2004). The Center for Public Policy issued a report in 2006 that indicated that if all of the dropouts in Texas between 2000 and 2004 had remained in school it would have cost an additional 180 million dollars. However, the report goes on to show that what seems like high costs would be more than offset by the 3

billion dollars in extra income that would be generated if the 16-19 year olds lacking a diploma graduated (Balfanz, 2006). Dropouts cost the state of Texas in ways such as increased welfare and more dependence on public healthcare and higher incarceration rates (Balfanz, 2006). On average, high school graduation lowers subsequent probability of incarceration by 3.4 percentage points for African Americans (Balfanz, 2006).

In short, the dropout rate for African American males has an exponential impact on the growth and sustainability of American society. As a country, societal matters such as those aforementioned degraded the possibility of mobility on a global scale both socially and economically. Attentiveness in regards to the African American male dropout rate will generate a body of research that adds value to the quest to resolve a holistic concern thereby giving rise to a productive society.

Dropout Prevention Measures through Educational Reforms for African American Males

Balfanz (2006) studied schools across the country that had successfully overcome many of the barriers to graduation for minority students and were able to compete with state and national averages. Of these schools he found critical common approaches: (a) they work hard to create personalized learning for all students (career interests), (b) They focus on making sure students attend school every day, (c) They use data to track progress and make changes when needed, (d) they provide support for students who are below grade level, and (e) they hold high expectations and expect good outcomes for all students (Balfanz, 2006).

Balfanz (2006) suggests that in order to close achievement gaps there must be a strengthened connection between high schools and colleges and employers, thereby

producing career ready high school graduates. Balfanz (2006) identified 14 schools in Texas that are beating the odds by graduating higher than expected percentages of its students through employing the aforementioned critical approaches. The 14 schools in Texas are comprised of over 50% of students that qualify for free lunch, 50% or more of the students are African American or Latino and the total school enrollment is more than 200 students (Balfanz, 2006). Of the 14 schools, the urban schools listed that exhibit the highest graduation rates for minorities focus heavily on career and vocational education.

Vocational education began in 19th century in the United States but became career and technical education in the 1990's in order to keep up with the needs of the changing workplace (Castellano & Stringfield, 2002). Career and technical education included more academies to prepare students both for the workplace and for college or technical schools (Castellano & Stringfield, 2002).

High school career academies were originally designed to address the needs of at-risk students (Stern, 1992). Stern (1992) suggests that the reason at-risk students do not do well is that they feel that school is irrelevant to the real world. The intended solution provided by career academies is career-oriented education affiliated with local businesses that would make the connection between school and work (Stern, 1992). Stern (1992) believes that if students see this connection, they will stay in school and perform better.

Students enter academies in either the ninth or tenth grade and continue through high school graduation, having taken all or most of their courses together from a group of teachers dedicated to the academy. Courses include a core academic curriculum (mathematics, English, social science, and science) and an organized theme of vocational courses around which the academy is focused. These vocational courses involve

exploration and the study of a career field (such as health, business, or performing arts). Academic and vocational courses are integrated by organizing each class in such a way that students see the connection between what they are doing in their academic and vocational courses (see California Department of Education, 1994; Robyn & Hanser, 1995; Stern et al., 1992).

Career academies are usually schools within schools in which both academic and vocational curriculum are usually integrated around a career theme (Castellano & Stringfield, 2002). Other components often include established partnerships with businesses in order to build connections between school and work (Castellano & Stringfield, 2002). Students may self-select into a career academy, but they are typically referred to an academy by teachers and counselors because of substandard performance in traditional academic coursework—having low grades, exhibiting poor attendance, and earning few credits towards graduation. The selection process may differ somewhat among schools and perhaps also among cohorts within schools.

Emergence of Career Academies and Implications for Dropout Rates

In the last two decades there have been eight reform efforts focused on improving secondary schools through a career focus (Castellano & Stringfield, 2002). Career Academies were among those reform movements that were studied to determine the impact on at-risk students. Kemple and Snipes (2000) reported the following outcomes related to career academies:

1. Among students at risk of dropping out, career academies significantly reduced dropout rates and increased credits earned.

2. Among students at low risk of dropping out, career academies increased their likelihood of graduating on schedule and increased their vocational course taking without reducing academic course curriculum.
3. Academies that provided strong interpersonal supports to students in the early years of high school appeared to be most successful in achieving positive outcomes.
4. Academy students were more successful than their non-academy counterparts at a local four-year university.

Career academy outcomes were studied for 18 cohorts of entering students enrolled in a total of eight schools in five major urban school districts in the United States. Compared to the outcomes of students in the general academic programs of the same schools, career academy students had higher first-year grade point averages, higher attendance rates, and higher rates of four-year graduation in the majority of the implementation schools (Elliot, Hanser, & Gilroy, 2002).

The California Department of Education launched a partnership with the California Partnership Academy (CPA) to develop a plan to meet the needs of students that exhibited boredom and disconnection from school. The original purpose of the CPAs was to identify students who appeared to be at high risk of dropping out of school, and provide an educational experience that would motivate and enable them to obtain high school diplomas (Hester, Saroyan, & Stern, 2012). The California Partnership Academies (CPA) adopted the linked learning model, which consists of both core academic curriculum as well as career and technical education. Students were enrolled in career academies and consistently receive exposure to the four components of the linked

learning model for career academies: rigorous academics, real world technical skills, work based learning, and personalized support (www.connectedcalifornia.com/essentialelements).

The California Department of Education, along with the James Irvine Foundation, compiled a report to evaluate the effectiveness of the CPAs by comparing students enrolled in the academies with students enrolled in traditional high schools (Hester, Saroyan, & Stern, 2012). The report revealed that students in career academies are more likely than similar peers to remain in the district through the 12th grade and outperform them in credit accumulation in the 9th–11th grades (Hester, Saroyan, & Stern, 2012). The findings also revealed that on average, students enrolled in certified pathways were 2.2 percentage points more likely to stay within their district from 9th to 10th grade, 4.6 percentage points more likely to stay through 11th grade, and 5.2 percentage points more likely to remain through 12th grade, compared with similar peers in traditional high school programs (Hester et al., 2012). These differences likely occur because students continue to attend school instead of dropping out before graduation. These findings indicate that students in certified pathways may be more engaged than similar peers due to their motivation to remain in school (Hester, Saroyan, & Stern, 2012).

The Houston Independent School District (HISD) is currently the largest in the state of Texas. Presently the district services approximately 215,000 students in Pre-Kindergarten through 12th grade of which 24.9% of the population is identified as African American (Houston Independent School District/Facts and Figures). The Houston Independent dropout rate is currently 12.5%. The dropout rate for African American students in Houston ISD is currently 17%, well above the district rate. The

dropout rate for Hispanics students is 11.9% and 6.3% for White students (Houston Independent School District/Facts and Figures).

Due to the graduation rates for African Americans and other minority students continuing to be higher than that of White students The Houston Independent School District has developed a goal to improve Dropout and Completion Rates (Houston Independent School District/District Improvement Plan). The goal is for HISD schools is to lower the dropout rate and increase the graduation rate with the ultimate goal of having all HISD students graduate with their cohort group. Houston ISD proposes to achieve the decreased dropout and increased completion requirements necessary for each school to receive at least a Recognized rating by the state's accountability system. The goals are specified as such:

1. HISD will increase the percentage of students on a longitudinal four-year cohort for first-time ninth graders.
2. The annual target is a 3 percentage point increase for all students and each student group (All, African American, Hispanic, White and Economically Disadvantaged) until the goal of 95 percent is reached. (Houston Independent School District/District Improvement Plan)

In order to reach these targets Houston ISD has developed the following strategies:

1. Provide students with opportunities to participate in Career & Technical Student Organizations (CTSO) that support CTE curriculum.
2. Provide students with career pathway resources to ensure that CTE programs offer quality experiences and industry certifications. (Houston Independent School District/District Improvement Plan)

Career academies include pathways that are designed to provide students with opportunities to choose a desired career field of interest upon entering high school. There are 190 career pathways in 37 Houston ISD schools (Houston Independent School District/Career and Technology). Of the approved pathways there are 16 career fields with approved course sequences that begin during a student's ninth grade school year. The 16 major career pathways include: STEM, Agriculture, Architecture and Construction, Arts and Communications, Business management, Education Training, Finance, Government and Public Administration, Health Science, Hospitality and Tourism, Human Services, Information Technology, Manufacturing, Transportation Distribution Logistics, Law-Public Safety Corrections and security, and Marketing (Houston Independent School District/Career and Technology).

There are currently 31 high schools in Houston ISD that have established Career Academies with distinguished career pathways. There is one high school for careers that is accessible to students living in all district attendance zones and offers multiple career pathways for students to explore. There are also three magnet high schools that offer specialized career training to include: High school for Health professions, High school for Law enforcement and Criminal Justice, and the Energy Institute (Houston Independent School District/Career and Technology).

Summary

The impacts of not receiving a high school diploma have increased substantially in the United States. Failing to graduate from high school exposes dropouts to substantially lower wages, higher risks for unemployment and a greater risk for dependency on governmental aid. Despite the increases in consequences, African

American males continue to have an exceptionally high dropout rate. The disparities between the dropout rates for African American males and their white counterparts have continued to plague the United States since the development of the public school system. This continued through segregation, the Civil Rights Movement and beyond. Even with national attempts such as No Child Left Behind and The Common Core, African American students, particularly males, continue to fall prey to the dropout epidemic. The Critical Race Theory provides the lens necessary to examine the current practices at both the state and national level. The voices of African American males must be heard and policies must be evaluated for equity and true commitment to the advancement of all students.

It is imperative that the dropout crisis for African American males be evaluated. The social and economic hardships created by the lack of earning a high school diploma are detrimental to both individuals and society as a whole. Living in poverty as well as other socioeconomic factors are strong predictors of dropping out (Wood, 1994). As high numbers of African American males continue to live in poverty and experience overexposure to violence and negative influences due to their neighborhoods, the potential for academic success declines (Fine & Burns, 2003).

The dropout rate for African American males is a problem that requires attention from educators and legislators. Educational institutions must work to develop strategies and policies that will effectively engage African American male students in school and provide support for them to complete high school despite their socioeconomic status. By understanding Critical Race Theory, school personnel can become more aware of and self-reflective of their own views about African American males (Ford & Moore, 2013).

This self-awareness is imperative to the work of providing equitable and culturally responsive education to all students to include African American males.

The emergence of career pathways in high schools has been attributed to increased student engagement and more positive student outcomes in terms of grade point average, attendance and graduation rates. Current research describes the factors contributing to African American males dropping out; however, little research exists that examines the specific outcomes for African American males enrolled in career pathways while in high school. The researcher seeks to determine if there is a difference in the dropout rates for African American male students that are enrolled in career pathways and those that are not enrolled in career pathways.

Chapter 3

Design of Study

Methodology

Described in this chapter are the methods that were used in the empirical, quantitative investigation. In the first section, the research questions previously described will be restated. Next, the research design of this investigation, along with its strengths and limitations, is discussed. Then, the setting and the sample used in this investigation are addressed. In the third section, the data collection method and strategies are outlined. Then, the instruments used in this investigation are discussed. Following an examination of the instruments, the data analysis methods used to address the research questions are provided. Finally, the limitations of this investigation are described.

Introduction

The purpose of this study was to examine differences that might be present in dropout rates between African American male students enrolled in career academies and African American male students who were not enrolled in career academies. As such, the attendance rates of a cohort of 641 African American male students was analyzed with students who were enrolled in career pathways in 2011-2012 and students who were not enrolled in a career pathway in 2011-2012. Two inferential statistical procedures were calculated to address the research questions. First, an independent samples *t*-test was used to determine whether differences were present in the attendance rates and GPAs for the two groups of students in this study. This test was appropriate because these variables are quantitative. Then, to determine whether differences were present in the dropout rates, a Pearson chi-square test was used. This test was appropriate because the dropout rate

variable was categorical. More information about these statistical procedures is provided below.

Research Questions

1. What is the difference in attendance rates between African American males who were enrolled in a career academy and African American males who were not enrolled in a career academy for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?
2. What is the difference in GPAs between African American males who were enrolled in a career academy and African American males who were not enrolled in a career academy for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?
3. What are the demographic characteristics of African American males whose data were analyzed in this multiyear investigation, with respect to the categories of at-risk and special education for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?
4. Is there a statistical difference between dropout rates of African American male students enrolled in career academies and African American males who were not enrolled in career academies?

Research Design

Employed in this empirical investigation was a comparative research design (Johnson & Christensen, 2008). In this empirical, quantitative investigation, four years of already existing data were obtained and analyzed herein. As such, the use of archival data constitutes a causal comparative research design for this investigation. The independent

variable of enrollment or non-enrollment in a career academy had already occurred for the African American males whose data were obtained and analyzed. The dependent variables of attendance rates, GPAs, and dropout rates had already occurred, as well. Moreover, no extraneous variables were controlled due to the use of pre-existing data (Johnson & Christensen, 2008).

In comparative research, the focus is on determining the presence of relationships between independent and dependent variables (Johnson & Christensen, 2008). Because no controls were present and students were not randomly assigned to the career academy, causal linkages between enrollment or non-enrollment in a career academy and attendance rates, GPAs, and dropout rates could not be established. The quantitative data obtained and analyzed herein were necessary to investigate the levels of implementation and understanding of both the CTE education and Career Academy/Pathway program models at the campus and district level. The research design used in this investigation is a typical research design when archival data are analyzed (Johnson & Christensen, 2008).

Setting

The school district that provided data that were analyzed in this study is currently the largest in the state of Texas (Urban ISD). Presently this school district services approximately 215,000 students in Pre-Kindergarten through 12th grade of which 24.9% of the population is identified as African American. The dropout rate is currently 12.5%, with the dropout rate for African American students being higher, at 17.0%. Dropout rates for Hispanic and White students are 11.9% and 6.3%, respectively (Houston Independent School District/Facts and Figures).

In this school district, 31 high schools have established Career Academies with distinguished career pathways. One high school is present for careers that is accessible to students living in all district attendance zones and offers multiple career pathways for students to explore. Three magnet high schools are present that offer specialized career training to include: High school for Health professions, High school for Law enforcement and Criminal Justice, and the Energy Institute (Houston Independent School District/Career and Technology). Due to the graduation rates for African Americans and other minority students continuing to be higher than that of White students, this school district has developed a goal to improve Dropout and Completion Rates (Houston Independent School District/District Improvement Plan).

The goal for Urban ISD's schools is to lower the dropout rate and increase the graduation rate. Urban ISD proposes to achieve the decreased dropout and increased completion requirements necessary for each school to receive at least a Recognized rating by the state's accountability system. The goals are specified as such:

1. Urban ISD will increase the percentage of students on a longitudinal four-year cohort for first-time ninth graders.
2. The annual target is a 3 percentage point increase for all students and each student group (All, African American, Hispanic, White and Economically Disadvantaged) until the goal of 95% is reached. (Houston Independent School District/District Improvement Plan)

In order to reach these targets Urban ISD has developed the following strategies:

1. Provide students with opportunities to participate in Career & Technical Student Organizations (CTSO) that support CTE curriculum.

2. Provide students with career pathway resources to ensure that CTE programs offer quality experiences and industry certifications. (Houston Independent School District/District Improvement Plan)

Career academies include pathways that are designed to provide students with opportunities to choose a desired career field of interest upon entering high school. There are 190 career pathways in 37 Urban ISD schools (Houston Independent School District/Career and Technology). Of the approved pathways, 16 career fields exist with approved course sequences that begin during a student's ninth grade school year. The 16 major career pathways include: STEM, Agriculture, Architecture and Construction, Arts and Communications, Business management, Education Training, Finance, Government and Public Administration, Health Science, Hospitality and Tourism, Human Services, Information Technology, Manufacturing, Transportation Distribution Logistics, Law-Public Safety Corrections and security, and Marketing (Houston Independent School District/Career and Technology).

Students are enrolled in an introductory course for their pathway during their freshman year, this course is coded as Sequence 1. Each year students take courses as designated by the approved pathway course sequence. Students take the next course in the sequence during their sophomore year which is coded as Sequence 2, the course taken their junior year is coded as Sequence 3 and their pathway course taken during their senior year is coded as Sequence 4 (Houston Independent School District/Career and Technology). Once students have completed the entire course sequence, they are eligible to obtain industry certifications and other opportunities to include paid internships (Houston Independent School District/Career and Technology).

Participants

A random sample of 641 African American male students who entered high school in 2011 were selected for this investigation. Students were not identified by name but rather were assigned a number to prevent their identification. To be a participant in this investigation, students were selected based upon their enrollment or non-enrollment in a career academy in 2011 and their being African American male students. Also present in the obtained data were whether or not students had completed high school in the spring of 2015 with their cohort.

Participants in this study included African American male students enrolled in career academies within Urban Independent School District and African American male students who were not enrolled in career academies within the Urban Independent School District. Students whose data are presented in this study were selected based on their initial enrollment and identification in the 2011-2012 school year. African American male students were identified as having been enrolled or having not been enrolled in a Sequence 1 career pathway course.

The sample selection began with all African American male students who entered high school in the fall of 2011. The student sample was narrowed further by selecting all African American male students who were enrolled in career academies and all African American male students who were not enrolled in career academies. The study was not limited to students identified in a small sample of schools within the school district. Instead, the entire African American male student population within the Urban Independent School District was the initial data pool. Students for the sample were randomly selected to include African American male students who were enrolled in

career pathways and African American male students who were not enrolled in career pathways.

Instruments

The researcher used the district's electronic student data systems to collect the quantitative data necessary to conduct the study. The electronic system used in the district to store student information was Chancery. System data portals were accessed to pull individual student information. Information retrieved through this system included state, district, campus, and individual student averages.

The specific dependent variables for which information were obtained were attendance rates, GPAs, and dropout rates. As such, these data did not come from standardized assessments such as the current state-mandated assessment, the State of Texas Assessment of Academic Readiness. Any errors that might affect the statistical findings from this study would involve human error, such as reporting incorrectly whether or not the student had attended school, student GPA, whether or not the student had dropped out of school, and whether or not the student had been enrolled in a career academy.

The data sources used for the quantitative data for this study were archival in nature. The researcher received written approval from the school district whose student data were analyzed in this study to assess student confidential records and was granted permission of the study by the district's Research Review Committee. The researcher worked closely with the district's Director of Career and Technology Education, Director of Technology Information Systems, and Student Accountability to collect the archival data as per the criteria outlined in this study. A meeting was held with the researcher and

the district individuals to discuss the data needed for the purpose of this study. In addition, the researcher consulted with the district individuals to ensure the accuracy of the student data collected. The data were then sent to the researcher in an excel format. The format of the excel file is provided in Appendix A. To conduct the statistical procedures required to answer the previously delineated research questions, the excel file was converted into a Statistical Package for the Social Sciences-PC (SPSS) Version 22.0 data file. The format of the SPSS data file is provided in Appendix B.

Data Analysis

The Excel file that was provided to this researcher involved the following columns that can be viewed in Appendix A: Career Tech Code; Career Tech Code for each of the school years of data analyzed; Campus Student Was Enrolled; Grade Level of Student; Gender of Student; Whether or Not the Student was At-Risk; Whether or Not the Student was Enrolled in Special Education; Number of Days the Student Was Enrolled on Campus; Number of Days the Student was Present on Campus; Attendance Rate of Student; Student GPA; and Whether or Not the Student Graduated. A separate excel file was present for each of the three school years of data analyzed in this investigation.

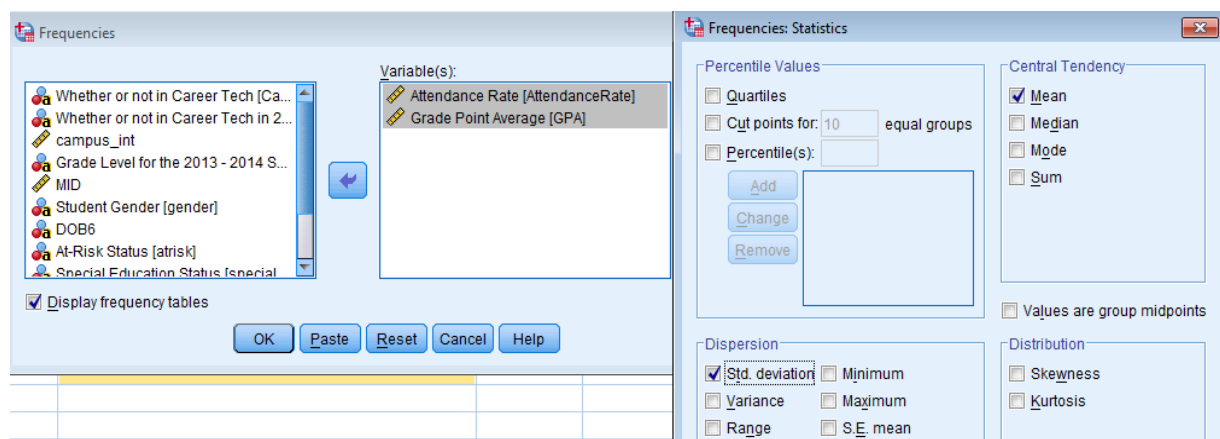
Following receipt of the Excel files, they were converted into SPSS data files. The columns in the SPSS data file which can be seen in Appendix B were: CareerTechCode (Whether or Not the Student was Enrolled in Career Tech); CareerTechCode1112 (Whether or Not the Student was Enrolled in Career Tech in 2011-2012 School Year); Campus_int (Campus Where Student was Enrolled); Grade Level for the 2013 - 2014 School Year; Gender; Date of Birth; At-Risk (At-Risk Status [0, No, is NOT an at-risk student; 1, Yes, was an at-risk student]); Special_Ed (Special Education Status [0, No, is

NOT enrolled in special education; 1, Yes, was enrolled in special education]); Day enrolled (Days Student WAs Enrolled in School); DAY Present (Days Student was Present at School); Attendance Rate; and GPA (Grade Point Average).

Through the use of inferential statistical procedures, the extent to which relationships were present between African American male student enrollment in career academies and completion rates was determined. To be identified as a student enrolled in a career pathway, the student had to continue within a set career pathway for a total of three school years. A CTE code of level 1 can be maintained between freshman and sophomore year while a progression to at least level 2 entering into junior year and a level 3 is achieved by graduation.

The mean graduation rate was ascertained for both the group of African American male students who had been enrolled in career academies and for the group of African American male students who had not been enrolled in career academies. Also calculated were the mean attendance rates and average GPAs for both groups of African American male students. Shown below is a snapshot of the SPSS commands used to conduct these calculations.

Figure 3.1

*Inferential Statistical Procedure Setup for Relationships Between Career Academies**Enrollment of African American Male Students Enrollment vs. Completion Rates*

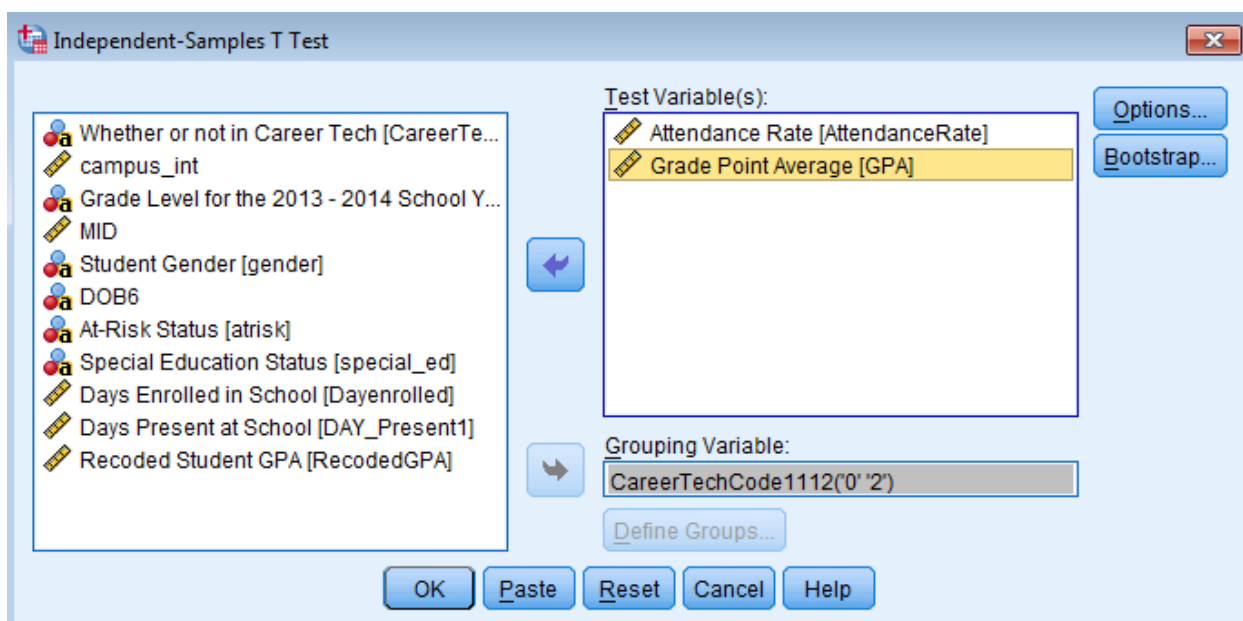
To address the previously specified research questions, independent samples t -tests were calculated. This statistical procedure is an appropriate inferential statistical technique when two groups are present, as were in this investigation, and when the dependent variables are continuous, interval level data (Field, 2013). The dependent variables of dropout rates, graduation rates, and GPAs all constituted continuous, interval level data. A separate independent samples t -test was conducted for each research question. In an independent samples t -test, the individual scores in each of the two groups in this study were summed and then divided by the number of individuals in each group (Field, 2013). The resulting mean for the two groups was then statistically compared to ascertain whether the difference between the two means was unlikely to have occurred less than 5% of the time (i.e., $p < .05$). A picture of the independent samples t -test screen in SPSS is provided below. For more detailed information regarding the underlying

assumptions of the independent samples t -test and the statistical formula involved, readers are referred to the Field (2013) text.

A Cohen's D test was also run to determine the effect size value for this statistically significant difference between each dependent variable for African American males enrolled in Career Academies and those that were not enrolled in Career Academies with the exception of the graduation rates. A Cramer's V test will be used to determine whether a statistically significant difference exists between graduation rates for the two groups. For the purposes of this study an effect size of 0.0 to 0.2 will be considered small, 0.0% to 14.7% (Cohen, 1988). An effect size of 0.3 to 0.5 will be considered medium, 21.3% to 33.0% (Cohen, 1988). An effect size of 0.6 to 0.8 will be considered large, 38.2% to 47.4% (Cohen, 1988).

Figure 3.2

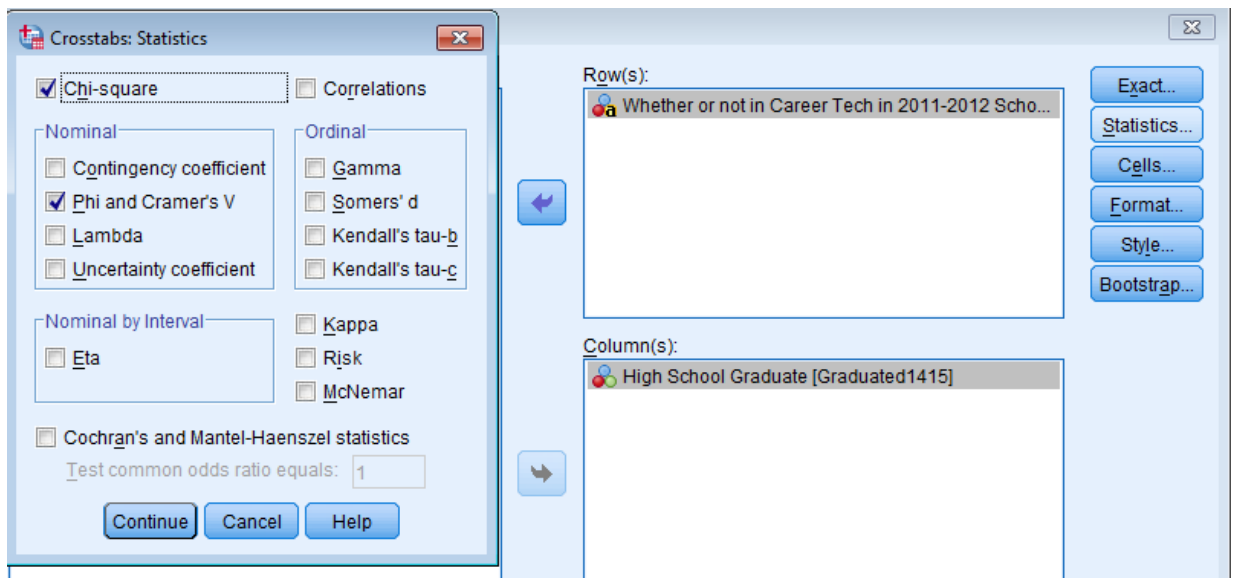
Independent Samples T-test Setup for Attendance Rate and Grade Point Average



For the 2014-2015 school year, the last year of data analyzed in this investigation, a Pearson chi-square procedure was conducted to determine whether a statistically significant difference was present in the dropout rates of African American male students enrolled in career academies compared to African American males who were not enrolled in career academies. This statistical procedure was the appropriate inferential statistical procedure to use because both the independent variable (i.e., career academy enrollment) and the dependent variable (i.e., dropout or not) were both categorical in nature. Through clicking on the Analyze, Descriptive Statistics, and then Crosstabs, the Pearson chi-square procedure can be selected. A screenshot of this procedure is provided below. For more detailed information regarding the underlying assumptions of the Pearson chi-square procedure and the statistical formula involved, readers are referred to the Field (2013) text.

Figure 3.3

Pearson Chi-Square Setup for Correlation between Dropout Rates of African American Male Students Enrolled in Career Academies vs. African American Males Not Enrolled in Career Academies



Limitations

Several limitations are important to consider in this investigation. First, because this study was not experimental in nature, no causal linkage can be presumed to be present between enrollment in a career academy and the dependent variables of dropout rates, graduation rates, and GPAs (Johnson & Christensen, 2008). Second, no variables were controlled in this causal comparative study, variables that might be related to student success in school. These variables include, but are not limited, to family support, involvement in extracurricular activities, and intrinsic motivation. These factors may influence a student's commitment to completing high school as well. Third, another factor to consider is the process for choosing students to participate in the career pathways. If enrollment in the career academies requires an application and certain academic criteria to be met, then student participants may be more likely to possess a strong work ethic regardless of enrollment in a career pathway.

The current federal, state and local dropout rates for African American students include both male and female students. This study does not include female participants, thus there will be no data analyzed for this population. Finally, this study will analyze quantitative data only. Thus, the data collected will not address participant's feelings and other variables associated with their experiences while in high school.

Chapter 4

Results

In this chapter, each research question will be addressed one at a time. Descriptive statistics will be provided for each of the school years of data analyzed. Then, inferential statistical procedures will be reported regarding differences in dropout rates, attendance rates, and GPA as a function of CTE involvement. With respect to the number of participants in this investigation, 641 students had data for the 2011-2012 and 2014-2015 school years. The descriptive statistics for the number of days these students were enrolled in school, number of days they were present at school, attendance rate, GPA, and graduation rates for the 2011 through 2015 school years are provided (Table 4.1). These descriptive statistics are provided for all students, regardless of their CTE involvement.

Table 4.1

Descriptive Statistics for Days at School, GPAs, and High School Graduation from 2011-2015

Statistic	Days		Attendance Rate	Grade Point Average	High School Graduate
	Enrolled in School	Days Present at School			
<i>M</i>	163.10	149.71	90.66	2.39	0.80
<i>Mdn</i>	174.00	164.00	94.25	2.36	1.00
<i>SD</i>	32.14	36.27	11.47	0.79	0.39
<i>Min</i>	6.0	3.0	21.1	0.24	0.0
<i>Max</i>	174.0	174.0	100.0	4.86	1.0

The average number of days these students were enrolled at school was 163.10, with the average number of days they were present at school being 149.71 (Table 4.1).

This difference between the enrollment and attendance days reflected an average attendance rate of 90.66%. The grade point average for these students was 2.39, a mid-C grade. The Median values were higher than the *M* values, with the exception of student grade point average. The median value for days enrolled on school was 174.00 while the median value for days present was 164.00, thus the median attendance rate was 94.25. The SD value for days enrolled in school was 32.14 while the SD value for days present was 36.27 (Table 4.1). The SD value for attendance rate was 11.47. The SD value for grade point average was 0.79 while the SD value for graduation was 0.39 (Table 4.1). The *SD* values were reflective of a great deal of variability in student attendance rates, grade point averages, as well as in the other variables present.

The Min number of days enrolled was 6.0 while the Max number of days enrolled was 174.0. The Min number of days present was 3.0 while the Max number of days present was 174.0 (Table 4.1). The Min attendance rate was 21.1 and the Max attendance rate was 100.00. The Min GPA was 0.24 whereas the Max GPA was 4.86. The Min high school graduation status was 0.0 which means that the students did not graduate and the Max graduation status was 1.0 which means that the students did graduate.

Descriptive statistics are provided for students who were not involved in CTE from 2011 - 2015. The descriptive statistics for the number of days these students were enrolled in school, number of days they were present at school, attendance rate, GPA, and graduation rates for the 2011 through 2015 school years are provided (Table 4.2). A total of 395 students whose data were analyzed in this study were not in CTE.

For this group of students who were not in CTE, their average number of days enrolled in school was 162.34 while the average number of days present at school was

148.35 days, which constituted an attendance rate of 90.38% (Table 4.2). This attendance rate was lower than the average attendance rate of all students, 90.66, as presented in Table 4.1. The grade point average for this group of students who were not in CTE was 2.33 (Table 4.2), which was slightly lower than the grade point average of all students, 2.39 (Table 4.1). The average graduation status was 0.77 (Table 4.2). Similar to Table 4.1, the Median values were higher than the *M* values for each variable, with the exception of student grade point average. The median value for days enrolled in school was 174.00 while the median value for days present at school was 163.00 (Table 4.2). This is higher than the mean values of 162.32 and 148.35 (Table 4.2). The median value for the attendance rate was 93.95 and the mean value for grade point average was 2.26 (Table 4.2). The mean high school graduation status was 1.00.

Congruent with the values presented in Table 4.1, the *SDs* in Table 4.2 were also indicative of substantial variability in student days present at school, attendance rates, and grade point averages. The *SD* for days enrolled in school was 33.75 and 37.27 for days present at school (Table 4.2). The *SD* for attendance rate was 10.93 and 0.77 for grade point average (Table 4.2). The *SD* for graduation status was 0.42 (Table 4.2). Also delineated in Table 4.2 are the minimum and maximum values for each of the five variables on which data are presented. The minimum number of days enrolled in school for non-CTE students was 6.0 while the max was 174.0 (Table 4.2). The Min number of days present at school was 3.0 whereas the maximum number of days present at school was 174.0 (Table 4.2). The Min attendance rate was 23.1 whereas the maximum attendance rate was 100.00 (Table 4.2). The Min GPA for students not enrolled in CTE

was 0.53 while the maximum GPA was 4.59 (Table 4.2), which is lower than the Max GPA for all students, 4.86 (Table 4.1).

Table 4.2

Descriptive Statistics for Days at School, GPAs, and High School Graduation for Students Who Were Not in CTE from 2011-2015

Statistic	Days		Attendance Rate	Grade Point Average	High School Graduate
	Enrolled in School	Days Present at School			
<i>M</i>	162.34	148.35	90.38	2.33	0.77
<i>Mdn</i>	174.00	163.00	93.95	2.26	1.00
<i>SD</i>	33.75	37.27	10.93	0.77	0.42
<i>Min</i>	6.0	3.0	23.1	0.53	0.0
<i>Max</i>	174.0	174.0	100.0	4.59	1.0

Descriptive statistics for the 2011 – 2015 school years are now provided for students who were involved in CTE (Table 4.3). A total of 246 students whose data were analyzed in this study were in CTE. The average number of days enrolled was 164.31 (Table 4.3). The average number of days that students who were in CTE were present at school was 151.89 (Table 4.3), a value that was slightly higher than 148.35, the average number of days that students who were not in CTE were present at school (Table 4.2). This value, 151.89, reflected an average attendance rate of 91.10%, which was slightly higher than the average attendance rate of 90.38% for students who were not in CTE. The average student grade point average for students who were in CTE was 2.51 (Table 4.3), a slightly higher GPA than 2.33 (Table 4.2), which was the GPA for students who were not in CTE.

Similar to Tables 4.1 and 4.2, the Median values were higher than the *M* values for each variable, with the exception of student grade point average. The median value for days enrolled in school for students who were involved in CTE was 174.00 while the median value for days present at school was 165.00 (Table 4.3). This is higher than the mean values of 164.31 and 151.89 (Table 4.3). The median value for the attendance rate was 95.40 and the mean value for grade point average was 2.48 (Table 4.3). The mean high school graduation status was 1.00.

Congruent with the values presented in Tables 4.1 and 4.2, the *SDs* in Table 4.3 were also indicate of substantial variability in student days present at school, attendance rates, and grade point averages. The *SD* for days enrolled in school was 29.41 and 34.56 for days present at school (Table 4.3). The *SD* for attendance rate was 12.31 and 0.82 for grade point average (Table 4.3). The *SD* for graduation status was 0.34 (Table 4.3). Also delineated in Table 4.3 are the minimum and maximum values for each of the five variables on which data are presented. The minimum number of days enrolled in school for CTE students was 38.0 while the max was 174.0 (Table 4.3). The Min number of days present at school was 8.0 whereas the maximum number of days present at school was 174.0 (Table 4.3). The Min attendance rate was 21.1 whereas the maximum attendance rate was 100.00 (Table 4.3). The Min GPA for students enrolled in CTE was 0.24 whereas the maximum GPA was 4.86.

Table 4.3

Descriptive Statistics for Days at School, GPAs, and High School Graduation for Students Who Were in CTE from 2011-2015

Statistic	Days Enrolled in School	Days Present at School	Attendance Rate	Grade Point Average	High School Graduate
<i>M</i>	164.31	151.89	91.10	2.51	0.87
<i>Mdn</i>	174.00	165.00	95.40	2.48	1.00
<i>SD</i>	29.41	34.56	12.31	0.82	0.34
<i>Min</i>	38.0	8.0	21.1	0.24	0.0
<i>Max</i>	174.0	174.0	100.0	4.86	1.0

The first year of data analyzed was the 2011-2012 school year, the beginning year in which students were enrolled in a career academy in this study. The average attendance rates and average GPAs are presented in Table 4.4. Descriptive statistics are reported separately by enrollment or non-enrollment in a career academy. For students who were enrolled in a career academy, their average attendance rate was 93.23%, compared to an average attendance rate of 91.24% for students who were not enrolled in a career academy. The SD for attendance for students not enrolled in a career academy was 11.57 and the SD for career academy students' attendance was 11.08 (Table 4.4). Both groups of students had similar degrees of variability in their attendance rates, as expressed by their *SDs* for attendance rates. With respect to grade point average, students who were enrolled in a career academy had a higher average GPA, 2.26, than did students who were not enrolled in a career academy, 2.00 (Table 4.4). Similar variability occurred when *SDs* were present in student GPA for both groups of students. The SD for GPA's

for students not enrolled in a career academy was 0.84 and the SD for students enrolled in a career academy was 0.89 (Table 4.4). The sample sizes for the two variables of attendance rate and GPAs differed substantially, with over 1,000 students who had attendance rate data available, but with only 202 students on whom grade point average data were present.

Table 4.4

Descriptive Statistics for Attendance Rates and GPA by Career Academy Enrollment for the 2011-2012 School Year

Student Success by Career Academy Enrollment	<i>n</i>	<i>M</i>	<i>SD</i>
Attendance Rate			
Not Enrolled in a Career Academy	722	91.24	11.57
Enrolled in a Career Academy	369	93.23	11.08
GPA			
Not Enrolled in a Career Academy	130	2.00	0.84
Enrolled in a Career Academy	72	2.26	0.89

To determine whether a statistically significant difference was present in the attendance rates and GPAs between African American males who were enrolled in a career academy and African American males who were not enrolled in such an academy, two independent samples *t*-tests were conducted. This inferential statistical procedure was appropriate because the independent variable consisted of two groups (i.e., either enrolled or not enrolled in a career academy) and the dependent variables were ratio level data. Accordingly, one independent samples *t*-test was calculated for attendance rates, followed by a second independent samples *t*-test for student GPAs. These procedures

were conducted to determine the extent to which these two groups of students were similar at the beginning of this multiyear investigation.

The independent samples *t*-test revealed a statistically significant difference in attendance rates for African American males as a function of their enrollment in a career academy, $t(770.31) = 2.76, p = .006$. The Cohen's *d*, or the effect size value for this statistically significant difference was 0.18, or a small effect size (Cohen, 1988). The attendance rates of African American males were 1.99% higher when enrolled in a career academy than for African American males who were not enrolled. Regarding student GPAs, the independent samples *t*-test yielded a statistically significant difference for African American males as a function of their enrollment in a career academy, $t(138.98) = 1.97, p = .05$. The effect size, or Cohen's *d* for this statistically significant difference was 0.30, or a medium effect size (Cohen, 1988). African American males who were enrolled in a career academy had higher average GPAs, 0.26 points higher, than did their peers who were not enrolled in a career academy.

Frequencies and percentages were calculated to determine two relevant programmatic characteristics of African American males whose data were analyzed in this multiyear investigation. The numbers and percentages of African American males who were determined to be at-risk and the numbers and percentages of African American males who were enrolled in special education were calculated. These statistics were calculated separately by whether or not students were enrolled in a career academy. Of the students who were enrolled in a career academy, 51.5% of them were determined to be at-risk, with 48.5% of the students who were enrolled in a career academy not being

at-risk (Table 4.5). Regarding students who were not enrolled in a career academy, 67.9% of them were at-risk and 32.1% were determined to not be at-risk (Table 4.5).

Table 4.5

Frequencies and Percentages of At-Risk by Career Academy Enrollment for the 2011-2012 School Year

Programmatic Characteristic by Career Academy Enrollment	<i>n</i>	<i>%age</i>
At-Risk		
Not Enrolled in a Career Academy	496	67.9
Enrolled in a Career Academy	190	51.5
Not At-Risk		
Not Enrolled in a Career Academy	234	32.1
Enrolled in a Career Academy	179	48.5

Revealed in Table 4.6 are the numbers and percentages of African American males who were enrolled in special education and who were either in a career academy or were not in a career academy in the 2011-2012 school year. With respect to this group of students who were enrolled in a career academy, 11.1% of them were also enrolled in special education, with 88.9% of the students who were enrolled in a career academy not being also enrolled in special education services (Table 4.5). Regarding this group of students who were not enrolled in a career academy, 22.2% of them were receiving special education services and 77.8% were not also enrolled in special education (Table 4.5).

Table 4.6

*Frequencies and Percentages of Special Education Enrollment by Career Academy**Enrollment for the 2011-2012 School Year*

Programmatic Characteristic by Career Academy		
Enrollment	<i>n</i>	<i>%age</i>
Special Education		
Not Enrolled in a Career Academy	162	22.2
Enrolled in a Career Academy	41	11.1
Not in Special Education		
Not Enrolled in a Career Academy	568	77.8
Enrolled in a Career Academy	328	88.9

The second year of data analyzed was the 2012-2013 school year which constituted the second year in which students were enrolled in a career academy in this study. Descriptive statistics are reported separately by enrollment or non-enrollment in a career academy. Students who were enrolled in a career academy had an average attendance rate, 94.57%, that was higher than the average attendance rate, 91.39%, of students who were not enrolled in a career academy (Table 4.7). The *SDs* were substantially different for the two groups of students. The *SD* for the attendance rate for students not enrolled in career academies was 11.44 and the *SD* for the attendance rate for students who were enrolled in career academies was 6.75 (Table 4.7). The individual differences present in attendance rates for students who were enrolled in a career academy was about half of the attendance rate variability for students who were not enrolled in a career academy. For this school year, no data were available on student GPAs.

To determine whether a statistically significant difference was present in attendance rates between African American males who were enrolled in a career academy and African American males who were not enrolled in such an academy, an independent samples *t*-test was conducted. The independent samples *t*-test revealed a statistically significant difference in attendance rates for African American males as a function of their enrollment in a career academy, $t(844.98) = 5.09, p < .001$. The Cohen's *d*, or the effect size value for this statistically significant difference was 0.35, or a medium effect size (Cohen, 1988). The attendance rates of African American males were 3.18% higher when enrolled in a career academy than for African American males who were not enrolled (Table 4.7).

Table 4.7

Descriptive Statistics for Attendance Rates by Career Academy Enrollment for the 2012-2013 School Year

Student Success by Career Academy Enrollment	<i>n</i>	<i>M</i>	<i>SD</i>
Attendance Rate			
Not Enrolled in a Career Academy	549	91.39	11.44
Enrolled in a Career Academy	302	94.57	6.75

Frequencies and percentages were calculated to determine two relevant programmatic characteristics of African American males whose data were analyzed in this multiyear investigation. The numbers and percentages of African American males who were determined to be at-risk and the numbers and percentages of African American males who were enrolled in special education were calculated. For the 2012-2013 school year there were 229 at risk African American male students enrolled in a career academy

and 468 at risk students who were not enrolled in a career academy (Table 4.8). There were 73 African American male students who were not at risk students enrolled in a career academy and 89 not at-risk students who were not enrolled in a career academy (Table 4.8). These statistics were calculated separately by whether or not students were enrolled in a career academy.

In the 2012-2013 school year, of the students who were enrolled in a career academy, 75.8% of them were determined to be at-risk, with 24.2% of the students who were enrolled in a career academy not being at-risk (Table 4.8). Regarding students who were not enrolled in a career academy, 75.8% of them were at-risk and 24.2% were determined to not be at-risk (Table 4.8).

Table 4.8

Frequencies and Percentages of At-Risk by Career Academy Enrollment for the 2012-2013 School Year

Programmatic Characteristic by Career Academy Enrollment	<i>n</i>	<i>%age</i>
At-Risk		
Not Enrolled in a Career Academy	468	84.0
Enrolled in a Career Academy	229	75.8
Not At-Risk		
Not Enrolled in a Career Academy	89	16.0
Enrolled in a Career Academy	73	24.2

For the 2012 – 2013 school year of the 163 special education students, 130 of them were not enrolled in a career academy and 33 of them were enrolled in a career academy (Table 4.9). For the 2012-2013 school year there were 427 non special

education African American males enrolled in a career academy and 269 non special education students who were not enrolled in a career academy (Table 4.9). With respect to this group of students who were enrolled in a career academy, 10.9% of them were also enrolled in special education, with 89.1% of the students who were enrolled in a career academy not being also enrolled in special education services. Regarding this group of students who were not enrolled in a career academy, 23.3% of them were receiving special education services and 76.7% were not also enrolled in special education (Table 4.9).

Table 4.9

Frequencies and Percentages of Special Education Enrollment by Career Academy

Enrollment for the 2012-2013 School Year

Programmatic Characteristic by Career Academy Enrollment		
	<i>n</i>	<i>%age</i>
Special Education		
Not Enrolled in a Career Academy	130	23.3
Enrolled in a Career Academy	33	10.9
Not in Special Education		
Not Enrolled in a Career Academy	427	76.7
Enrolled in a Career Academy	269	89.1

For the 2013-2014 school year, data were again available for both attendance rates and GPAs. Accordingly, one independent samples *t*-test was calculated for attendance rates, followed by a second independent samples *t*-test for student GPAs. The independent samples *t*-test did reveal the presence of a statistically significant difference in attendance rates for African American males as a function of their enrollment in a

career academy, $t(626.80) = 2.13, p = .03$. The Cohen's d , or the effect size value for this non-statistically significant difference was 0.16, or a small effect size (Cohen, 1988). The attendance rates of African American males who were enrolled in a career academy were 1.70% higher than were the attendance rates of African American students who were not enrolled in a career academy.

Regarding student GPAs, the independent samples t -test yielded a statistically significant difference for African American males as a function of their enrollment in a career academy, $t(528.81) = 3.28, p = .001$. The Cohen's d , or the effect size value for this statistically significant difference was 0.26, or a small effect size (Cohen, 1988). The average GPA for students not enrolled in a career academy was 2.20 whereas the average GPA's for students enrolled in career academies was 2.42 (Table 4.10). The African American males who were enrolled in a career academy had higher average GPAs, 0.22 points higher, than did their peers who were not enrolled in a career academy. The average attendance rate was 93.44% for students who were enrolled in a career academy, compared to an average attendance rate of 91.74% for students who were not enrolled in a career academy (Table 4.10). The SDs for attendance rates was 11.40 for students not enrolled in a career academy and 9.55 for career academy students. The SDs for GPA's for students not enrolled in a career was 0.83 and 0.87 for career academy students (Table 4.10).

Table 4.10

Descriptive Statistics for Attendance Rates and GPA by Career Academy Enrollment for the 2013-2014 School Year

Student Success by Career Academy Enrollment	<i>n</i>	<i>M</i>	<i>SD</i>
Attendance Rate			
Not Enrolled in a Career Academy	451	91.74	11.40
Enrolled in a Career Academy	263	93.44	9.55
GPA			
Not Enrolled in a Career Academy	444	2.20	0.83
Enrolled in a Career Academy	263	2.42	0.87

For the 2013-2014 school year, frequencies and percentages were calculated to determine two relevant programmatic characteristics of African American males whose data were analyzed in this multiyear investigation. The numbers and percentages of African American males who were determined to be at-risk and the numbers and percentages of African American males who were enrolled in special education were calculated. For the 2013-2014 school year there were 194 at risk African American male students enrolled in a career academy and 385 at risk students who were not enrolled in a career academy (Table 4.11). There were 69 African American male students who were not at risk students enrolled in a career academy and 71 non at-risk students who were not enrolled in a career academy (Table 4.11). These statistics were calculated separately by whether or not students were enrolled in a career academy.

In the 2013-2014 school year, of the students who were enrolled in a career academy, 73.8% of them were determined to be at-risk, with 26.2% of the students who

were enrolled in a career academy not being at-risk (Table 4.11). Regarding students who were not enrolled in a career academy, 73.8% of them were at-risk and 26.2% were determined to not be at-risk (Table 4.11). These percentages are comparable to the percentages of students who were at-risk and enrolled or not enrolled in a career academy in the previous school year (Table 4.8).

Table 4.11

Frequencies and Percentages of At-Risk by Career Academy Enrollment for the 2013-2014 School Year

Programmatic Characteristic by Career Academy Enrollment	<i>n</i>	<i>%age</i>
At-Risk		
Not Enrolled in a Career Academy	385	84.4
Enrolled in a Career Academy	194	73.8
Not At-Risk		
Not Enrolled in a Career Academy	71	15.6
Enrolled in a Career Academy	69	26.2

The numbers and percentages of African American males who were enrolled or not enrolled in special education and whether or not they were enrolled in a career academy in the 2013-2014 school year are also delineated (Table 4.12). Of the 131 special education students, 25 of them were enrolled in a career academy and 106 of them were not enrolled in a career academy (Table 4.12). Of the students not enrolled in special education, 238 of them were enrolled in a career academy and 350 of them were not (Table 4.12). With respect to this group of students who were enrolled in a career academy, 9.5% of them were also enrolled in special education, with 90.5% of the

students who were enrolled in a career academy not being also enrolled in special education services. Regarding this group of students who were not enrolled in a career academy, 23.2% of them were receiving special education services and 76.8% were not also enrolled in special education.

Table 4.12

Frequencies and Percentages of Special Education Enrollment by Career Academy Enrollment for the 2013-2014 School Year

Programmatic Characteristic by Career Academy Enrollment	<i>n</i>	<i>%age</i>
Special Education		
Not Enrolled in a Career Academy	106	23.2
Enrolled in a Career Academy	25	9.5
Not in Special Education		
Not Enrolled in a Career Academy	350	76.8
Enrolled in a Career Academy	238	90.5

For the 2014-2015 school year, the last year of data analyzed in this investigation, a Pearson chi-square procedure was conducted to determine whether a statistically significant difference was present in the dropout rates of African American male students enrolled in career academies compared to African American males who were not enrolled in career academies. This statistical procedure was the appropriate inferential statistical procedure to use because both the independent variable (i.e., career academy enrollment) and the dependent variable (i.e., dropout or not) were both categorical in nature. With respect to career academy enrollment and dropping out of school, the Pearson chi-square

yielded a statistically significant difference, $\chi^2(1) = 9.42, p = .002$. The effect size for this finding, Cramer's V , was small, .12 (Cohen, 1988). Of the 395 students not enrolled on career academies, 303 of them graduated and 92 of them did not (Table 4.13), thus the percentage of graduates for students not enrolled on career academies was 76.7% (Table 4.13). Of the 246 students enrolled in a career academy, 213 of them graduated and 33 did not graduate, thus the graduation rate for students enrolled in career academies was 86.6% (Table 4.13). The graduation rate for African American males who were enrolled in a career academy was 86.6% compared to only 76.7% of African American males who were not enrolled in a career academy. Also evidenced in Table 4.13 is that 23.3% of African American males who were not enrolled in a career academy failed to graduate, compared to 13.4% of African American males who were enrolled in a career academy.

Table 4.13

Frequencies and Percentages of Graduation for Students by Career Academy Enrollment

Career Academy Status	Did Not Graduate <i>n</i> (%)	Graduated <i>n</i> (%)
Not Enrolled in a Career Academy	92 23.3%	303 76.7%
Enrolled in a Career Academy	33 13.4%	213 86.6%

For the 2014-2015 school year the average attendance rate for the 390 students who were not enrolled in a career academy was 90.38 with a SD value of 10.93 (Table 4.14). The average attendance rate for the 244 students who were enrolled in a career academy was 91.09 with a SD value of 12.31 (Table 4.14). The average GPA for the 392

students who were not enrolled in a career academy was 2.33 with a SD of 0.77. The average GPA for the 245 students who were enrolled in a career academy was 2.51 with a SD of 0.83 (Table 4.14).

To determine whether a statistically significant difference was present in the attendance rates and GPAs of African American males who were enrolled in a career academy, two independent samples *t*-tests were conducted. This inferential statistical procedure was appropriate because the independent variable consisted of two groups (i.e., either enrolled or not enrolled in a career academy) and the dependent variables were ratio level data. Accordingly, one independent samples *t*-test was calculated for attendance rates, followed by a second independent samples *t*-test for student GPAs. The independent samples *t*-test did not reveal a statistically significant difference in attendance rates for African American males as a function of their enrollment in a career academy, $t(470.38) = -0.75, p = .46$. The Cohen's *d*, or the effect size value for this non-statistically significant difference was 0.11, or a small effect size (Cohen, 1988). The attendance rates of African American males were within 0.72%, regardless of their enrollment in a career academy.

Regarding student GPAs, the independent samples *t*-test yielded a statistically significant difference for African American males as a function of their enrollment in a career academy, $t(492.18) = -2.87, p = .004$. The Cohen's *d*, or the effect size value for this statistically significant difference was 0.22, or a small effect size (Cohen, 1988). African American males who were enrolled in a career academy had higher average GPAs, 0.19 points higher, than did their peers who were not enrolled in a career academy.

As indicated in Table 4.14, the average attendance rate of students who were enrolled in a career academy was 91.09%, compared to an average attendance rate of 90.38% for students who were not enrolled in a career academy. The extent of variability in students' attendance at school was similar, as indicated by *SDs* that were close in value. The average GPA of students who were enrolled in a career academy was 2.51, which was higher than the average GPA of students who were not enrolled in a career academy, 2.33. The extent of variability in students' GPAs was similar, as indicated by *SDs* that was close in value.

Table 4.14

Descriptive Statistics for Attendance Rates and GPA by Career Academy Enrollment for the 2014-2015 School Year

Student Success by Career Academy Enrollment	<i>n</i>	<i>M</i>	<i>SD</i>
Attendance Rate			
Not Enrolled in a Career Academy	390	90.38	10.93
Enrolled in a Career Academy	244	91.09	12.31
GPA			
Not Enrolled in a Career Academy	392	2.33	0.77
Enrolled in a Career Academy	245	2.51	0.83

The degree to which differences were present in the dependent variables of days enrolled at school, days present at school, attendance rates, and GPA as a function of student characteristics of at-risk and special education enrollment was addressed. Descriptive statistics for these variables for only at-risk students are provided in Table 4.15. As delineated in Table 4.15, the average number of days enrolled at school was

similar for both groups of at-risk students, regardless of whether or not they were enrolled in a career academy. The SD for days enrolled for non-career academy students was 35.54 and 32.68 for career academy students (Table 4.15). The average number of days at school for at risk students not enrolled in career academies was 161.13 and 161.71 for those students who were enrolled in career academies (Table 4.15). For at-risk students, the average number of days present at school was higher for at-risk students who were enrolled in a career academy, 147.69, than for at-risk students who were not enrolled in a career academy, 146.17 (Table 4.15). The SD value for this variable was 38.98 and 37.81, respectively (Table 4.15). Furthermore, the average attendance rate of 89.70% was higher for at-risk students who were enrolled in a career academy than the average attendance rate of 89.59% for at-risk students who were not enrolled in a career academy with SD values of 13.46 and 11.39, respectively (Table 4.15). Similarly, the average GPA was higher for at-risk students who were enrolled in a career academy, 2.25, than for at-risk students who were not enrolled in a career academy, 2.19. The SD value for GPAs for non-career academy students as well as career academy students was 0.68 (Table 4.15).

Table 4.15

Descriptive Statistics for Days Enrolled at School, Days Present at School, Attendance Rates, and GPA by Career Academy Enrollment for At-Risk Students for the 2014-2015 School Year

Variable	Involvement	<i>n</i>	<i>M</i>	<i>SD</i>
Days Enrolled in School	Not in CTE	339	161.13	35.54
	In CTE	192	161.71	32.68
Days Present at School	Not in CTE	339	146.17	38.98
	In CTE	192	147.69	37.81
Attendance Rate	Not in CTE	339	89.59	11.39
	In CTE	192	89.70	13.46
Grade Point Average	Not in CTE	341	2.19	0.68
	In CTE	193	2.25	0.68

To determine whether at-risk students differed in these variables as a function of their involvement in CTE, independent samples *t*-tests were calculated for days enrolled in schools, days present at school, attendance rates, and GPAs. The independent samples *t*-test did not reveal a statistically significant difference in days enrolled at school as a function of their enrollment in a career academy, $t(424.77) = -0.19$, $p = .85$, $d = 0.02$, below small; nor in the number of days present at school, $t(406.90) = -0.45$, $p = .66$, $d = 0.04$, below small; nor in attendance rates, $t(345.34) = -0.10$, $p = .92$, $d = 0.01$, below small; and not in GPAs, $t(396.23) = -0.98$, $p = .33$, $d = 0.09$, below small. Regardless of their CTE involvement, at-risk students had similar performance in these variables.

Next, the degree to which differences were present in the dependent variables of days enrolled at school, days present at school, attendance rates, and GPA for students who were enrolled in special education was addressed. Descriptive statistics for these variables for only students who were enrolled in special education are provided. The average number of days enrolled in school for students in special education who were also enrolled in a career academy was 153.84 and 158.04 for those students who were not enrolled in a career academy (Table 4.16). The SD value for days enrolled was 44.13 for those enrolled in career academies and 40.07 for those that were not (Table 4.16). Days present at school was lower for students in special education who were also enrolled in a career academy, 136.68, than for students in special education who were not enrolled in a career academy, 143.68. The SD value for students enrolled in career academies was 49.96 and 44.72 for those students who were not enrolled in career academies. This difference in number of days present at school reflected a difference in attendance rates. Students who were in special education and who were enrolled in a career academy had an average attendance rate of 85.63% (SD value 16.26), which was lower than the average attendance rate of 88.70% (SD value 14.27) for students in special education who were not enrolled in a career academy (Table 4.16). Finally, the average GPA was lower, 1.71 (SD value 0.70), for students in special education who were enrolled in a career academy than for students in special education who were not enrolled in a career academy, 2.01 (SD value 0.56). These averages were not congruent with the averages for students who were determined to be at-risk.

Table 4.16

Descriptive Statistics for Days Enrolled at School, Days Present at School, Attendance Rates, and GPA by Career Academy Enrollment for Students in Special Education for the 2014-2015 School Year

Variable	Involvement	<i>n</i>	<i>M</i>	<i>SD</i>
Days Enrolled in School	Not in CTE	89	158.04	40.07
	In CTE	25	153.84	44.13
Days Present at School	Not in CTE	89	143.34	44.72
	In CTE	25	136.68	49.96
Attendance Rate	Not in CTE	89	88.70	14.27
	In CTE	25	85.63	16.26
Grade Point Average	Not in CTE	89	2.01	0.56
	In CTE	25	1.71	0.70

To ascertain whether students who were enrolled in special education differed in these variables as a function of their involvement in CTE, independent samples *t*-tests were calculated for days enrolled in schools, days present at school, attendance rates, and GPAs. The independent samples *t*-test did not reveal a statistically significant difference in days enrolled at school as a function of their enrollment in a career academy, $t(35.88) = 0.43$, $p = .67$, $d = 0.10$, below small; nor in the number of days present at school, $t(35.53) = 0.60$, $p = .55$, $d = 0.14$, below small; nor in attendance rates, $t(35.08) = 0.86$, $p = .40$, $d = 0.20$, small; and not in GPAs, $t(33.18) = 1.98$, $p = .06$, $d = 0.48$, a near

moderate effect size. Regardless of their CTE involvement, students who were enrolled in special education had similar performance in these variables.

Summary

In this investigation, four years of school data on African American males were analyzed with respect to their enrollment or non-enrollment in a career academy. For each year, the attendance rates and GPAs (except for one year) of these students were compared as a function of their career academy enrollment. Student average attendance rates and GPAs were similar across the school years of data analyzes herein for the two groups of students: those students who were enrolled in a career academy and those students who were not enrolled in a career academy. In most instances, the average performance was better for students who were enrolled in a career academy than for their peers who were not enrolled in a career academy.

With respect to the research question regarding attendance rates in the 2011-2012 school year for African American males as a function of their enrollment in a career academy, a statistically significant difference was revealed. The attendance rates of African American males were 1.99% higher when enrolled in a career academy than for African American males who were not enrolled. Regarding student GPAs for African American males as a function of their enrollment in a career academy, a statistically significant result was also present. African American males who were enrolled in a career academy had higher average GPAs, 0.26 points higher, than did their peers who were not enrolled in a career academy.

Regarding the research question concerning attendance rates in the 2012-2013 school year between African American males who were enrolled in a career academy and

African American males who were not enrolled in such an academy, a statistically significant difference was yielded. The attendance rates of African American males were 3.18% higher when enrolled in a career academy than for African American males who were not enrolled.

For the 2013-2014 school year, a statistically significant difference was revealed in attendance rates for African American males as a function of their enrollment in a career academy. The attendance rates of African American males who were enrolled in a career academy were 1.70% higher than were the attendance rates of African American students who were not enrolled in a career academy. With respect to student GPAs for the 2013-2014 school year, a statistically significant difference was yielded for African American males as a function of their enrollment in a career academy. African American males who were enrolled in a career academy had higher average GPAs, 0.22 points higher, than did their peers who were not enrolled in a career academy.

For the 2014-2015 school year, no statistically significant difference was revealed in attendance rates for African American males as a function of their enrollment in a career academy. The average attendance rate of students who were enrolled in a career academy was 91.09%, compared to an average attendance rate of 90.38% for students who were not enrolled in a career academy. With respect to student GPA's for the 2014-2015 school year, a statistically significance difference was yielded for African American males as a function of their enrollment in a career academy. The average GPA of students who were enrolled in a career academy was 2.51, which was higher than the average GPA of students who were not enrolled in a career academy, 2.33.

With respect to the central research question of this investigation, the graduation rates of African American males who were enrolled in a career academy were statistically significantly higher than were the graduation rates of African American males who were not enrolled in a career academy.

Readers should note the consistency of the statistical analyses and descriptive statistics reported in this Chapter 4. African American males who were enrolled in a career academy had higher average attendance rates than did African American males who were not enrolled in a career academy. Similarly, African American males who were enrolled in a career academy had higher GPAs than African American males who were not enrolled in a career academy.

Chapter 5

Conclusions

This chapter provides a review of the significance of the study, a summary analysis of the research associated with the differences in the dropout rates for African American male students enrolled in career academies and those who are not enrolled in career academies. Additionally, this chapter delineates the implications for policy and practice at both the district and state level. The chapter concludes with a discussion of study limitations and a summation.

Review of study significance

Approximately 25% of America's students drop out of high school which indicates that there is pervasive issue facing both schools and society at large. The dropout issue is even more pervasive as it relates to minority students. The overwhelming number of minority students that are still not earning high school diplomas is indicative of the work to be done in terms of narrowing the progress gap between minority students and their counterparts. In 2008, Asian/Pacific Islanders were reported as having the lowest dropout rate at 2.4% followed by White students at 2.7% (Stillwell et al., 2011). The four-year graduation rate is still 66% or less for African American students in 20 states and for Hispanic students in 16 states (Balfanz et al., 2013). There are no states in which the graduation rate for white students is below 66% and only four states in which it is 75% or less (Balfanz et al., 2013).

There is current evidence to support the disparities in the educational experiences between African American males and their counterparts. The graduation rate for African American males in Texas was 65.7 % as compared to 81.6% for White students (*The*

Journal of at risk Issues, 2010). Certain school policies still exist that set African American males on a trajectory of dropping out of school prior to obtaining their diploma (Walker, 2012). In comparison to their female and other racial group counterparts, African American males experience higher rates of grade-level retention, school suspensions, and alternative school placement (Walker, 2012).

Critical Race Theory as a conceptual framework is a lens that enables a discourse about race, class, and gender to be the centerpiece for an analysis of African American male underachievement (*Teachers College Record*, 2008). African American males in urban school systems are disproportionately experiencing negative school outcomes, including: academic failure, high dropout rates, low graduation rates, low test scores, low grade point averages, low representation in gifted education and Advanced Placement classes, and excessively high participation rates in special education (Ford & Moore, 2013).

The Texas Education Agency reports a disproportionate number of African American male students being placed in alternative schools as a disciplinary action (Texas Education Agency, 2007). Alternative schools as disciplinary placement have been linked to the negative academic and social outcomes of dropping out of school and involvement with juvenile justice systems (Bell, 2014).

The implications for African American male dropouts are detrimental to both the individual as well as society at large. Dropping out of high school leads to young adults being unprepared for jobs, poorly educated, trapped in poverty, and unemployment (Campbell, 2004). The U.S. Department of Labor projects that 60% of jobs created between 2010 and the present will require at least some postsecondary education

(Steinberg, Almeida, & Jobs for the Future, 2004). Consequently, an individual that does not earn a high school diploma will be at risk for not being able to obtain a sustainable job.

There have been numerous governmental attempts to address the dropout crisis. These attempts date back to the Common School Movement, The Elementary and Secondary Education Act, No Child Left behind, and most recently the Common Core. In addition to these governmental interventions, there have been eight reform efforts focused on improving secondary schools through a career focus over the last two decades (Castellano & Stringfield, 2002). Career Academies were among those reform movements that were studied to determine the impact on at-risk students. Kemple and Snipes (2000) reported the following outcomes related to career academies:

1. Among students at risk of dropping out, career academies significantly reduced dropout rates and increased credits earned.
2. Among students at low risk of dropping out, career academies increased their likelihood of graduating on schedule and increased their vocational course taking without reducing academic course curriculum.
3. Academies that provided strong interpersonal supports to students in the early years of high school appeared to be most successful in achieving positive outcomes.
4. Academy students were more successful than their non-academy counterparts at a local four-year university.

Career academy outcomes were studied for 18 cohorts of entering students enrolled in a total of eight schools in five major urban school districts in the United

States. Compared to the outcomes of students in the general academic programs of the same schools, career academy students had higher first-year grade point averages, higher attendance rates, and higher rates of four-year graduation in the majority of the implementation schools (Elliot, Hanser, & Gilroy, 2002).

Analysis of Research Study

Efforts both nationally and in the state of Texas have occurred to increase the number of high schools students enrolled in career and technological education courses to include career pathways. The Urban ISD located in south Texas has adopted the following strategies to prevent dropouts and to increase the number of students that graduate:

1. Provide students with opportunities to participate in Career & Technical Student Organizations (CTSO) that support CTE curriculum.
2. Provide students with career pathway resources to ensure that CTE programs offer quality experiences and industry certifications. (Houston Independent School District/District Improvement Plan)

Using archival quantitative student information reported through the student information system referred to as Chancery, the researcher attempted to address the following four research questions in an effort to identify a relationship between career academy enrollment and attendance, grade point averages, and graduation rates:

1. What is the difference in attendance rates between African American males who were enrolled in a career academy and African American males who were not enrolled in a career academy for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?

2. What is the difference in GPAs between African American males who were enrolled in a career academy and African American males who were not enrolled in a career academy for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?
3. What are the demographic characteristics of African American males whose data were analyzed in this multiyear investigation, with respect to the categories of at-risk and special education for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?
4. Is there a statistical difference between dropout rates of African American male students enrolled in career academies and African American males who were not enrolled in career academies?

A random sample of 641 African American male students who entered high school in 2011 was selected for this investigation. Students were not identified by name but rather were assigned a number to prevent their identification. To be a participant in this investigation, students were selected based upon their enrollment or non-enrollment in a career academy in 2011 and their being African American male students. Also present in the obtained data were whether or not students had completed high school in the spring of 2015 with their cohort. Participants in this study included African American male students enrolled in career academies within Urban Independent School District and African American male students who were not enrolled in career academies within the Urban Independent School District. Students whose data are presented in this study were selected based on their initial enrollment and identification in the 2011-2012 school year.

African American male students were identified as having been enrolled or having not been enrolled in a Sequence 1 career pathway course.

Research Question #1: What is the difference in attendance rates between African American males who were enrolled in a career academy and African American males who were not enrolled in a career academy for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?

Based upon the results of the analysis for the 2011 – 2012 school year a statistically significant difference exists between attendance rates for African American males enrolled in career academies and those that were not enrolled in career academies. The attendance rates of African American male students enrolled in career academies was 1.99% higher than those that were not enrolled in career academies. For the 2012- 2013 school year attendance for African American males enrolled in career academies was 3.18% higher than those that were not enrolled in career academies. For the 2013-2014 school year attendance for African American males enrolled in career academies was 1.70% higher than those that were not enrolled in career academies. For the 2014-2015 school year the independent samples t-test did not reveal a statistically significance difference in attendance rates for African American males enrolled in career academies and those that were not enrolled in career academies.

Research Question #2: What is the difference in GPAs between African American males who were enrolled in a career academy and African American males who were not enrolled in a career academy for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?

Regarding GPS's for the 2011 – 2012 school year, the independent samples t-test that was conducted yielded a statistically significant difference for African American males as a function of their enrollment in a career academy, $t(138.98) = 1.97, p = .05$. African American males who were enrolled in a career academy has higher average GPAs, 0.26 points higher, than did their peers who were not enrolled in a career academy. For the 2013-2014 school year, African American males who were enrolled in a career academy has higher average GPSs, 0.22 points higher, than did their peers who were not enrolled in a career academy. For the 2014-2015 school year, African American males who were enrolled in a career academy has higher average GPSs, 0.19 points higher, than did their peers who were not enrolled in a career academy.

Research Question #3: What are the demographic characteristics of African American males whose data were analyzed in this multiyear investigation, with respect to the categories of at-risk and special education for the 2011-2012, 2012-2013, 2013-2014, and 2014-2015 school years?

The independent samples t-test did not reveal a statistically difference in attendance rates and GPAs as a function of their enrollment in a career academy for at-risk students. The independent samples t-test did not reveal a statistically difference in attendance rates and GPAs as a function of their enrollment in a career academy for special education students.

Research Question #4: Is there a statistical difference between dropout rates of African American male students enrolled in career academies and African American males who were not enrolled in career academies?

For the 2014-2015 school year, the last year of data analyzed in this investigation, a Pearson chi-square procedure yielded a statistically significant difference between the dropout rates for African American male students enrolled in career academies and those that were not enrolled in career academies. The graduation rate for African American males students enrolled in career academies was 86.6% as compared to 76.7% of African American male students who were not enrolled in career academies. Of the African American male students enrolled in career academies only 13.4 % of them failed to graduate as opposed to 23.3.% of the African American male students who were not enrolled in career academies.

Implications for Policy and Practice

The current literature on African American male dropouts suggests that there is a need for data that represent their point of view (Stack, 1974; Kluger, 1976). While there have been numerous efforts to address the dropout issue as a whole, it is incumbent upon local and national leaders to strategically address the issue of African American male dropouts.

This study reveals a statistically significant difference between the dropout rates for African American male students enrolled in career academies and those that were not enrolled in career academies. Educational institutions must work to develop strategies and policies that will effectively engage African American male students in school and provide support for them to complete high school despite their socioeconomic status. As evident in this study, there was no statistically significant difference between attendance rates and GPA's for students classified as at-risk nor was there a statistically significant difference for students classified as special ed. Consequently, enrolling students in career

academies and encouraging them to remain enrolled in career academies could potentially impact the number of African American male students that graduate from high school. High schools across the country should evaluate their current data to determine if African American male students are completing high school at the same rate as their counterparts. If this is not the case, then careful consideration should be given to implementing career academies and ensuring that the students that exhibit the highest potential for dropping out are placed in those academies and provided with learning experiences that: connect learning to the real world, provide field experiences, and offer the opportunity to earn income while enrolled in school.

Dropout prevention efforts on both the national and state level should seek to include career and technological education as a part of the strategic plan to increase positive school outcomes for African American male students. Of course, programs cannot be effectively implemented without resources and support from policy makers. Thus, an evaluation of current dropout prevention dollars needs to occur to ensure that they are being maximized in a way that will positively impact dropout prevention efforts for all students to include African American male students.

Implications for further Research

The first recommendation for further research is to expand upon this research by examining factors that contribute to African American male students not completing high school. Educational issues such as dropping out of high school are often complex and require a deep analysis of students' perceptions and experiences. Consequently, it would be beneficial to utilize not only attendance rates, GPA's and high school completion for quantitative analysis of career academy enrollment outcomes, but this quantitative

analysis should be paired with qualitative analysis that will allow deeper insights into the perceptions of AA male students and how and why their school experiences in some cases lead to lack of high school completion.

The second recommendation is to expand upon this research to determine the variation in high school completion, attendance rates and GPA's based on specific career pathway enrollment. Analyzing these dependent variables based on individual career pathways could provide further clarity around best practices and the allocation of resources designed to assist with producing positive school outcomes for African American male students.

Limitations of the Study

Several limitations are important to consider in this investigation. First, because this study was not experimental in nature, no causal linkage can be presumed to be present between enrollment in a career academy and the dependent variables of dropout rates, graduation rates, and GPAs (Johnson & Christensen, 2008). Second, no variables were controlled in this causal comparative study, variables that might be related to student success in school. These variables include, but are not limited, to family support, involvement in extracurricular activities, and intrinsic motivation. These factors may influence a student's commitment to completing high school as well. Third, another factor to consider is the process for choosing students to participate in the career pathways. If enrollment in the career academies requires an application and certain academic criteria to be met, then student participants may be more likely to possess a strong work ethic regardless of enrollment in a career pathway.

This study does not evaluate attendance, GPA's and graduation rates for African American male students as a function of their enrollment in a particular career pathway. Consequently, no causal linkage can be presumed between the particular career pathway chosen and the impact on the dependent variables of dropout rates, graduation rates and GPA's.

The current federal, state and local dropout rates for African American students include both male and female students. This study does not include female participants, thus there will be no data analyzed for this population. Finally, this study will analyze quantitative data only. Thus, the data collected will not address participant's feelings and other variables associated with their experiences while in high school.

Conclusion

This study began as a result of the researcher's observations while working at an urban high school for careers. It was evident that although the students enrolled there were primarily minority, economically disadvantaged, and in some cases special ed., they continued to achieve higher test scores, higher high school graduation rates, and more positive school outcomes as did their counterparts in neighboring traditional high schools.

Given that there is still evidence to support the fact that minority students, to include African American students, are still completing high school at rates well below their counterparts, it is imperative that schools and school districts take necessary steps to ensure high school completion African American students as well as all students.

During the course of this study, the researcher also developed a sense of appreciation for career and industry partnerships and the importance of engaging industry stakeholders in the educational process of students, especially students that are

predisposed to socioeconomic conditions that often lead to a lack of ability or willingness to complete high school.

The insight gained throughout this research study will empower me to establish a platform as an advocate for African American male students as well as all students. This platform will be used to enhance the educational experiences for a group of students that continue to exhibit the need for dedicated advocates in their educational surroundings.

References

- Balfanz, R., Bridgeland, J. M., Bruce, M., & Fox, J. H., Civic Enterprises, Johns Hopkins University, Everyone Graduates Center, America's Promise Alliance, and Alliance for Excellent Education. (2013). *Building a Grad Nation: Progress and Challenge in Ending the High School Dropout Epidemic. Annual Update, 2013*. Washington, DC: Civic Enterprises. Retrieved from <http://www.civicerprises.net>.
- Bell, Edward E. (2014). Graduating black males: A generic qualitative study. *The Qualitative Report*, 19(13), 1–10.
- Bridgeland, J. M. (2010). The new dropout challenge: Bridging gaps among students, parents, and teachers. *New Directions for Youth Development*, 2010(127), 101–110. <http://doi.org/10.1002/yd.366>.
- Calabrese, R. L., & Poe, J. (1991). Alienation: An Explanation of High Dropout Rates among African American and Latino Students. *Educational Research Quarterly*, 14(4), 22–26.
- Castellano, M., Stringfield, S., & Stone, J. R., III, National Dissemination Center for Career and Technical Education, Columbus, OH. (2002). *Career and Technical Education Reforms and Comprehensive School Reforms in High Schools: Their Impact on Education Outcomes for At-Risk Youth. The Highlight Zone: Research @ Work*. Columbus, OH: National Dissemination Center for Career and Technical Education. Retrieved from <http://www.nccte.org/publications/index.asp#highlightzones>.

- Chambers, T. V., Huggins, K. S., Locke, L. A., & Fowler, R. M. (2014). Between a "ROC" and a School Place: The Role of "Racial Opportunity Cost" in the Educational Experiences of Academically Successful Students of Color. *Educational Studies: Journal of the American Educational Studies Association*, 50(5), 464-497.
- Cochran-Smith, M. (2004). *Walking the road: Race, diversity, and social justice in teacher education*. New York: Teachers College Press.
- Cole, M. (2012). Critical race theory in education, Marxism and abstract racial domination. *British Journal of Sociology of Education*, 33(2), 167–183. <http://doi.org/10.1080/01425692.2011.649830>.
- Crenshaw, K. (1995). *Critical race theory: The key writings that formed the movement*. New York: New Press.
- Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work*. San Francisco: Jossey-Bass.
- Delgado, R., Stefancic, J., & Liendo, E. (2012). *Critical race theory: An introduction* (2nd ed.). United States: New York University Press.
- Delgado, R., & Stefancic, J. (2001). *Critical race theory: An introduction*. New York: New York University Press.
- Digneo, M. L. (2009). *Examining the High School Dropout Rate among African American and Hispanic Students*.
- Dixson, A. D., & Rousseau, C. K. (2006). *Critical race theory in education: All God's children got a song*. New York: Routledge.
- Du Bois, W. E. B. (1903). *The souls of Black folk: Essays and sketches*. Chicago: A. C.

McClurg & Co. (Cambridge).

Du Bois, W. E. B. (1899). *The Philadelphia Negro: A social study*. Philadelphia:

University of Pennsylvania.

DuBois, W. E. B. (2005). *The souls of black folk*. New York: Pocket Books. (Original work published 1905).

Elliott, M. N., Hanser, L. M., & Gilroy, C. L. (2002). Career Academies: Additional Evidence of Positive Student Outcomes. *Journal of Education for Students Placed at Risk*, 7(1), 71–90.

Edward, T. E., Gillborn, D., & Ladson-Billings, G. (Eds.). (2009). *Foundations of Critical Race Theory in Education*. New York: Routledge.

Fine, M., & Burns, A. (2003). Class Notes: Toward a Critical Psychology of Class and Schooling. *Journal of Social Issues*, 59(4), 841-860.

Fitzgerald, K., Gordon, T., Canty, A., Stitt, R. E., Onwuegbuzie, A. J., & Frels, R. K. (2013). Ethnic Differences in Completion Rates as a Function of School Size in Texas High Schools. *The Journal of At-Risk Issues*, 17(2).

Ford, D. Y., & Moore, J. L. (2013). Understanding and reversing underachievement, low achievement, and achievement gaps among high-ability African American males in urban school contexts. *The Urban Review*, 45(4), 399–415.
<http://doi.org/10.1007/s11256-013-0256-3>.

Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.

Graybill, S.W. (1997). Questions of race and culture: How they relate to the classroom for African American students. *The Clearing House*, 70(6), 311.

- Harris, C. (1993). Whiteness as property. *Harvard Law Review*, 106, 1709–1791.
Retrieved from <http://www.jstor.org/stable/1341787>.
- Howard, T. C. (2008). ‘Who Really Cares?’ The Disenfranchisement of African American Males in PreK-12 Schools: A Critical Race Theory Perspective. *Teachers College Record*, 110(5), 954–985.
- Hussar, W. J., & Bailey, T. M. (2013). *Projections of Education Statistics to 2022* (NCES 2014-015). Washington, D.C.: U.S. Government Printing Office: U.S. Department of Education, National Center for Education Statistics.
- Kemple, J. J., & Snipes, J. C. (2000). Career Academy Impacts for Students at High Risk of Dropping Out. UCLA: The Civil Rights Project / Proyecto Derechos Civiles.
Retrieved from: <http://escholarship.org/uc/item/40s4j03>.
- Kornhaber, M., Griffith, K., & Tyler, A. (2014). It's Not Education by Zip Code Anymore -- But What is It? Conceptions of Equity under the Common Core. *Education Policy Analysis Archives*, 22(4), 1-26. doi: 10.14507/epaa.v22n4.2014
- Kluger, R. (1975). Simple justice: the history of Brown v. Board of Education and Black America's struggle for equality. New York, NY: Knopf.
- Jackson, T. O., & Howard, T. C. (2014). The Continuing Legacy of Freedom Schools as Sites of Possibility for Equity and Social Justice for Black Student. *Western Journal of Black Studies; Fall 2014*, 38(3), 155.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*, San Francisco: Jossey-Bass.

- Ladson-Billings, G. (1998). Just what is critical race theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education*, 11, 7–24.
- Ladson-Billings, G. (2004). Landing on the Wrong Note: The Price We Paid for Brown. *Educational Researcher*, 33(7), 3-13. Retrieved from <http://www.jstor.org.ezproxy.lib.uh.edu/stable/3700092>.
- Ladson-Billings, G. (2005). *Beyond the big house: African American educators on teacher education*. New York: Teacher College Press.
- Ladson-Billings, G. 2006. Foreword. They're trying to wash us away: The adolescence of critical race theory in education. In *Critical race theory in education: All God's children got a song*, ed. A.D. Dixson and C.K. Rousseau. New York: Routledge.
- Ladson-Billings, G. & Tate, W.F. (1995). Toward a critical race theory. *Teachers College Record*, 97(1), 47-68.
- Losen, D., Orfield, G., & Balfanz, R. (2006). *Confronting the Graduation Rate Crisis in Texas*. Cambridge, MA: The Civil Rights Project at Harvard University.
- Mitchell, A. B., & Stewart, J. B. (2013). The efficacy of all-male academies: Insights from critical race theory (CRT). *Sex Roles*, 69(7-8), 382–392. <http://doi.org/10.1007/s11199-011-0074-6>.
- Monaghan, P. (1993, June 23). “Critical Race Theory” questions the role of legal doctrine in racial inequality. *Chronicle of Higher Education*, pp.A7, A9.

- Montecel, M. R., Cortez, J. D., & Cortez, A. (2004). Dropout-prevention programs: Right intent, wrong focus, and some suggestions on where to go from here. *Education and Urban Society*, 36(2), 169–188. <http://doi.org/10.1177/0013124503261327>.
- Nieto, S. (1999). *The light in their eyes: Creating multicultural learning communities*. New York: Teachers College Press.
- Nieto, S. M. (2002). Profoundly multicultural questions. *Educational Leadership*, 60(4), 6-10.
- Noguera, P. A., & Akom, A. (2000). CAUSES OF THE RACIAL ACHIEVEMENT GAP ALL DERIVE FROM UNEQUAL TREATMENT : Disparities Demystified.(racial gap in academic achievement). *The Nation*, 270(22), 29.
- Owens, J., Rosch, J., Muschkin, C., & Wyant, C., Duke University, Center for Child and Family Policy. (2008). Dropout Prevention: Strategies for Improving High School Graduation Rates.
- Parker, L., Deyhle, D., & Villenas, S. A. (1999). *Race is-- race isn't: Critical race theory and qualitative studies in education*. Boulder, CO: Westview Press.
- Popkewitz, T. S. (1998). *Struggling for the soul: The politics of schooling and the construction of the teacher*. New York: Teachers College Press.
- Rippa, S. A. (1984). *Education in a free society: An American history*. New York: Longman.
- Shade, B., Kelly, C. and Oberg, M. (1997). *Creating culturally responsive classrooms* Washington, DC: American Psychological Association.

- Sleeter, C.E., & Delgado Bernal, D. (2003). Critical pedagogy, critical race theory, and anti-racist education: Implications for multicultural education. In J. A. Banks & C.A.M. Banks (Eds.), (p. 240-260) *The handbook of research on multicultural education* (2nd. Ed.) San Francisco: Jossey-Bass.
- Solorzano, D. G. (1998). Critical race theory, race and gender microaggressions, and the experience of Chicana and Chicano scholars. *International Journal of Qualitative Studies in Education*, 11(1), 121-136.
- Solórzano, D. G., Yosso, T. J. (2002). A Critical Race Counterstory of Race, Racism, and Affirmative Action. *Equity & Excellence in Education*, 35(2) 155-168.
- Stack, C. B. (1974). *All our kin: strategies for survival in a Black community*. New York, NY: Harper & Row.
- Steinberg, A., & Almeida, C., Jobs for the Future, Boston, MA. (2004). *The Dropout Crisis: Promising Approaches in Prevention and Recovery*. Boston, MA: Jobs for the Future. Retrieved from <http://www.jiff.org>.
- Stern, D., Saroyan, P., & Hester, Candace H. (2012) *Comparing students in each California partnership academy with non-academy students at the same high school, 2009-10*. University of California – Berkeley: Career Academy Support Network.
- Stillwell, R., Sable, J., & Plotts, C., National Center for Education Statistics (ED). (2011). *Public School Graduates and Dropouts from the Common Core of Data: School Year 2008-09. First Look*. NCES 2011-312. Jessup, MD: National Center for Education Statistics. Retrieved from <http://nces.ed.gov/>

- Studier, C., ConnectEd: The California Center for College and Career. (2008). *Evidence from California Partnership Academies: One Model of Linked Learning Pathways*. Berkely, CA: ConnectEd: The California Center for College and Career. Retrieved from <http://www.ConnectEdCalifornia.org>
- Tate, W. F. (1997). Critical Race Theory and education: History, theory and implications. In M. Apple (Ed.), *Review of research in education*, vol. 22 (pp. 191–243). Washington: American Education Research Association.
doi:10.3102/0091732X022001195.
- Texas Education Agency. (2007). *Disciplinary alternative education program practices*. (Policy research ; rept. no. 17).
- Townsend Walker, B. L. (2012). Teacher education and African American males: Deconstructing pathways from the schoolhouse to the ‘big house’. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 35(4), 320–332.
<http://doi.org/10.1177/0888406412461158>.
- U.S. Department of Education. (2004). *No Child Left Behind: A tool kit for teachers*. Washington: Government Printing Office.
- Walden, L. M., & Kritsonis, W. A. (2008). The Impact of the Correlation between the No Child Left Behind Act’s High Stakes Testing and the High Drop-Out Rates of Minority Students.
- Warren, J. R., & Jenkins, K. N. (2005). High School Exit Examinations and High School Dropout in Texas and Florida, 1971-2000. *Sociology of Education*, 78(2), 122–143. Retrieved from <http://www.jstor.org/stable/4148900>.

- Weber, M. (1930/1958). *The protestant ethic and the spirit of capitalism*. (T. Parsons, Trans.). New York: Charles Scribner's Sons.
- Weinstein, C., Curran, M., & Tomlinson-Clarke, S. (2003). Culturally Responsive Classroom Management: Awareness into Action. *Theory Into Practice*, 42(4), 269-276.
- Wilkins, C. (2008). *A Review of 'Avoidable Losses: High Stakes Accountability and the Dropout Crisis.'* REL Technical Brief. REL 2008-No. 001. San Antonio, TX: Regional Educational Laboratory Southwest. Retrieved from <http://edlabs.ed.gov/RELSouthwest>.
- Wright, D. R., Fitzpatrick, K. M. (2004). PSYCOSOCIAL CORRELATES OF SUBSTANCE USE BEHAVIORS AMONG AFRICAN AMERICAN YOUTH. *Adolescence*, 39(156), 63-667.

Appendix A

Excel File Format

	A	B	C	D	E	F	G	H	I	J	K	L
1	CareerTechCode	CareerTechCode1112	campus_int	grade	gender	atrisk	special_ed	Dayenrolled	DAY_Present1	AttendanceRates	GPA	Graduated1415
2	2	0		112	M	1	1	174.00	171.0	98.3	2.9836	1
3	1	0		212	M	1	1	173.00	162.0	93.6	1.9231	1
4	1	0		212	M	1	0	173.00	169.0	97.7	1.7500	1
5	1	0		212	M	1	1	169.00	165.0	97.6	1.7308	1
6	2	0		212	M	1	0	174.00	163.0	93.7	1.9138	1
7	1	0		212	M	0	0	174.00	172.0	98.9	3.7593	1
8	1	0		211	M	1	1	140.00	87.0	62.1	1.3158	1
9	2	0		212	M	1	0	174.00	161.0	92.5	1.8036	1
10	1	0		212	M	1	0	174.00	171.0	98.3	1.5254	1

Appendix B
SPSS File Format

	Name	Type	Width	Decimals	Label	Values
1	CareerTech...	String	1	0	Whether or not in Career Tech	None
2	CareerTech...	String	1	0	Whether or not in Career Tech in 2011-2012 School Year	{0, NOT in ...
3	campus_int	Numeric	12	0		None
4	gradein2013...	String	2	0	Grade Level for the 2013 - 2014 School Year	None
5	MID	Numeric	12	0		None
6	gender	String	1	0	Student Gender	None
7	DOB6	String	6	0		None
8	atrisk	String	1	0	At-Risk Status	{0, No, is N...
9	special_ed	String	1	0	Special Education Status	{0, No, is N...
10	Dayenrolled	Numeric	12	1	Days Enrolled in School	None
11	DAY_Prese...	Numeric	12	1	Days Present at School	None
12	Attendance...	Numeric	12	1	Attendance Rate	None
13	GPA	Numeric	12	2	Grade Point Average	None
14	RecodedGPA	Numeric	8	2	Recoded Student GPA	None