

FLORIDA'S DEFINITION AND SUBSEQUENT CALCULATIONS OF A PUBLIC
HIGH SCHOOL GRADUATE: A CRITICAL RACE THEORY ANALYSIS

by

Terri N. Watson

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The College of Education

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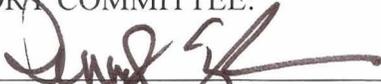
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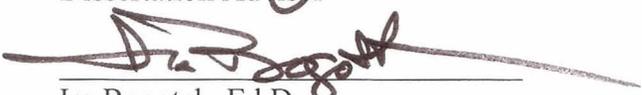
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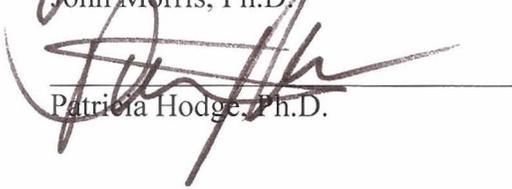
This dissertation was prepared under the direction of the candidate's dissertation advisor, Dr. Jennifer Sughrue, Department of Educational Leadership, and has been approved by the members of her supervisory committee. It was submitted to the faculty of the College of Education and was accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

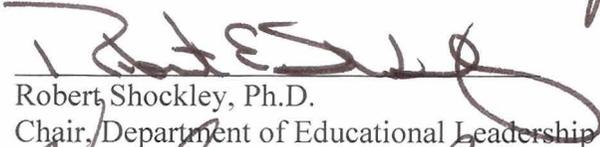
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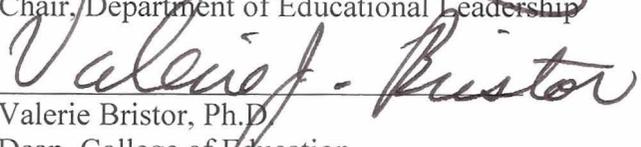

Jennifer Sughrue, Ph.D.
Dissertation Advisor

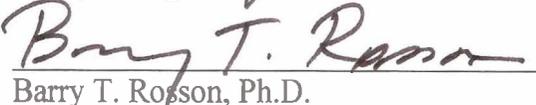

Ira Bogotch, Ed.D.

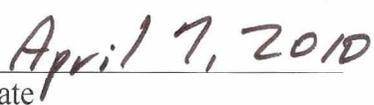

John Morris, Ph.D.


Patricia Hodge, Ph.D.


Robert Shockley, Ph.D.
Chair, Department of Educational Leadership


Valerie Bristor, Ph.D.
Dean, College of Education


Barry T. Rosson, Ph.D.
Dean, Graduate College


Date

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ABSTRACT

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On March 18, 2008, the American Civil Liberties Union (ACLU) of Florida filed a class action lawsuit against The Palm Beach County School Board and its district superintendent on behalf of approximately 176,000 students under their jurisdiction (*Schroeder v. The Palm Beach County School Board*, 2008). The plaintiffs cited the defendants for their failure “to provide a uniform, efficient, safe, secure, and high quality education” (p. 7) as required by the Florida Constitution, Article IX, § 1. They contended that their claim was substantiated by The School District of Palm Beach County’s (SDPBC) dismal high school graduation rates.

Spurred by the lawsuit, I wanted to understand the controversy surrounding high school graduation rates, in spite of decades of school reform measures, and why different calculation methods are utilized in the state of Florida. In respect to the latter point, I was curious to learn about the differences among graduation rate calculation methods and what impact, if any, these differences had on the reporting of high school graduation rates, particularly those for students of color.

Black America's past and present reality in public education has illustrated the need for new paradigms to address the achievement gap promulgated by contextual factors that serve to impede the academic achievement of all students. The statistical analyses and Critical Race Realist perspective, which has evolved from Critical Race Theory when applied to policy research, offered in this study found Florida's definition and subsequent calculations of a public high school graduate to result in significant and consistent differences among graduation rates relative to student race and graduation rate calculation method.

DEDICATION

Hold fast to dreams
For if dreams die
Life is a broken-wing bird
That cannot fly.

Langston Hughes

To the Creator, thank you for allowing me to dream.

To my parents, thank you for teaching me how to dream.

To my children, thank you for making my dreams come true.

To my husband, thank you for sharing my dreams.

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CHAPTER 1: INTRODUCTION

America's history is riddled with race-based injustices (Bell, 1980, 1987, 1992; DuBois, 1903). The Trail of Tears, the Watts Race Riots, and the internment of Japanese Americans are evidence of systemic injustices levied against people of color by majority populations. Public school systems too bear this shame (DuBois, 1935; Ladson-Billings & Tate, 1995; *Roberts v. Boston*, 1850; Woodson, 1990). Despite considerable litigation and school reform measures, the nation's public schools remain inherently separate and unequal (*Alexander v. Holmes County Board of Education*, 1969; *Brown v. Board of Education*, 1954; *Green v. County School Board of New Kent County*, 1968; *Griffin v. County School Board of Prince Edward County*, 1964; *Missouri v. Jenkins (Jenkins I)*, 1990; *Missouri v. Jenkins (Jenkins II)*, 1995; *Plessy v. Ferguson*, 1896; *Roberts v. Boston*, 1850; *Swann v. Charlotte-Mecklenburg Board of Education*, 1971) The gross inequities yet found in public schools across America are promulgated by policies and practices that continuously marginalize the most vulnerable populace, children of color (Darling-Hammond, 2006; López, 2003).

The No Child Left Behind Act (NCLB or "the Act") (2002) was intended to close the achievement gap characterized by students' racial, economic, and academic standing. After 8 years of implementation, questions have been raised regarding the efficacy of the Act (Freeman, 2005; Hollingworth, 2009) and the lack of consistency in the means used

to assess student achievement (Balfanz & Legers, 2004; Hall, 2005; Pinkus, 2006). Specifically, there is cause for concern as to how state-level graduation rates obfuscate the impact of broad definitions and race-based calculations of the nation's public high school graduates (Greene & Winters, 2006; Orfield, Losen, Wald, & Swanson, 2004). As graduation rates for Black and Hispanic children continue to fall short of their White counterparts, many educational activists have attempted to clarify the definition and calculation of a public high school graduate (Greene, 2001; Greene & Forster, 2003; Greene & Winters, 2005, 2006; Seastrom, Hoffman, Chapman, & Stillwell, 2005; Swanson, 2003, 2004; Warren, 2005).

This study investigated one aspect of the problem in one state: whether Florida's definition and subsequent calculations of a public high school graduate presented contrary and race-based reports of how many and which students graduate from high school. Florida's graduation rates and graduation rate calculation methods for academic years (AY) 2004-08 were analyzed using the lens of Critical Race Realism, a methodology founded in Critical Race Theory (CRT). This study was intended to inform the current debate surrounding the definition and calculation of a public high school graduate.

Background of the Problem

On March 18, 2008, the American Civil Liberties Union (ACLU) of Florida filed a class action lawsuit against The Palm Beach County School Board and its district superintendent on behalf of approximately 176,000 students under their jurisdiction (Schroeder, 2008). The plaintiffs cited the defendants for their failure "to provide a

uniform, efficient, safe, secure, and high quality education” (p. 7) as required by the Florida Constitution, Article IX, § 1. They contended that their claim was substantiated by The School District of Palm Beach County’s (SDPBC) dismal high school graduation rates. The plaintiffs further alleged that the methods utilized by Florida’s Department of Education (FLDOE) to calculate its graduates were flawed based on alternative methodologies developed by Christopher Swanson (2003) and Sherman Dorn (2006).¹

In the 19-page *Schroeder* (2008) complaint, the ACLU alleged that when “using the most generous method of calculating graduation rates, almost 1/3 of the students [who attended SDPBC’s public schools] do not graduate” (p. 2). The plaintiffs noted significant discrepancies in SDPBC’s public high school graduation rates when they compared the district’s rates, based on Florida’s Self-Reported Method (FSRM), to graduation rates as measured by the Cumulative Promotion Index (CPI) and a method developed by Dorn. During academic years (AY) 2002-04, for example, 66.6%, 66.0%, and 65.9% of SDPBC’s students graduated from high school based on FSRM calculations. In contrast, the CPI estimated only 56.0%, 55.2%, and 56.1% of SDPBC’s students graduated from high school for those same 3 years. Lastly, when applying the Dorn method the district’s figures fall even lower, yielding graduation rates of 53.8%, 54.9%, and 55.5% (see Figure 1).

As evidenced by these figures, the ACLU claimed that FSRM does not accurately depict Florida’s graduation rates. In the suit, among other charges, the plaintiffs claimed:

¹ In its decision to dismiss the case, the Palm Beach County Circuit Court cited that a private right of action does not exist under Article IX § 1 against the state, namely a school board or its superintendent (*Schroeder*, 2009).

32. Florida includes in its calculation of graduates students who do not receive a standard academic diploma.
33. Florida also counts students who have repeated a grade as graduates of the class with which they graduated, rather than the class with which they entered. Although the state is adding these students to the count of students who have graduated in that year, the state does not also add those students to the cohort of students with whom they should have graduated in four years. This practice artificially inflates the percentage of four-year “graduates” by making it appear that more students graduated in one four-year cohort than actually did.
34. There is evidence that Florida removes from the total number of students those students who drop out of school and immediately enroll in a [General Educational Development] GED program. These students are known as W26 withdrawals. However, these students are not added to the cohort of students who should have graduated that year. (*Schroeder, 2008, pp. 7-8*)

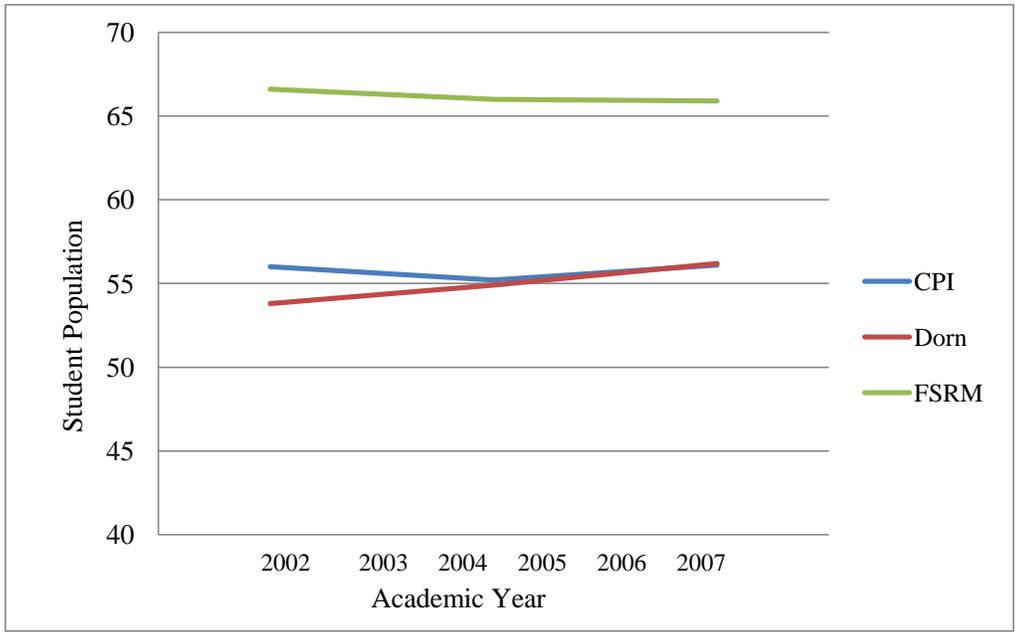


Figure 1. SDPBC’s graduation rates by percent of student population for AY 2001-07.

This complaint is representative of a growing national concern that states are trying to mask a distressing trend of low graduation rates by employing broad definitions and race-based calculations of a public high school graduate to inflate their graduation rates.

Statement of the Problem

NCLB (2002) defines a public high school graduate as one who has received a standard high school diploma on time with her or his cohort. Many states have challenged this federal definition and have deviated from the policy’s description of a public high school graduate. Studies have found the quantity and variation of exit options utilized by each state to identify their graduates to differ, skewing an accurate tally of the nation’s graduates (Balfanz & Legters, 2004; Education Week, 2008; Guy, Shin, Lee, & Thurlow, 1999; Orfield et al., 2004; Swanson 2004). The variety of definitions, calculations, and

range of paradigms used to assess high school graduation rates serve to obscure the very problem NCLB was intended to eradicate, the achievement gap.

Despite the fact that high school graduation is a prime indicator of educational achievement and economic prosperity (Amos, 2008; Heckman & LaFontaine, 2008; McKinsey & Company, 2009), the nation has paid little attention to the definitions and calculations used to determine who is graduating and with what kind of diploma until recently (NCLB, 2002; National Governor's Association (NGA) Compact, 2005; U.S. Secretary of Education . . . Announces, 2008). As a measure of Adequate Yearly Progress (AYP), NCLB requires the use of graduation rates as an indicator for academic accountability for high schools. States must purposely disaggregate their graduation data based on students' race or ethnicity, socioeconomic status, disability, and English proficiency. While NCLB calls for the aforementioned analysis of graduation data, current research lacks a comparative state-level study that explores the effects of race-based definitions and calculations of a public high school graduate.

Purpose of the Study

The purpose of this study was to investigate Florida's graduation rate calculation methods for AY 2004 – 08 and to apply a Critical Race Realism analysis to empirical findings. The results were to inform state and local policy makers of the effects of Florida's definition and subsequent calculations of a public high school graduate. The ultimate aim of this study was to improve and increase the opportunities for all students to graduate with standard high school diplomas.

Significance of the Study

In 1903, W. E. B. DuBois, a seminal African American scholar and sociologist, identified the immutable effects of racism as a factor in public education in relation to educational opportunities and outcomes. Unfortunately, the problem students of color faced in the 20th Century, as DuBois found, remains unchanged more than 100 years later. Despite decades of education-based reform measures, the most recent being NCLB, children of color are still left behind in public schools across America (DuBois, 1935; Kozol, 1991, 2005; Louis & Miles, 1990; Orfield & Eaton, 1996, Stovall, 2006; Swanson, 2003).

FLDOE deviates from NCLB's definition of a public high school graduate and its suggested calculation for determining the graduation rate. This study should determine whether Florida's graduation rate calculation methods disguise the reality of how many and which students graduate from high school with a standard high school diploma. The study should also provide comparative data as to how Florida defines and calculates a high school graduate relative to FSRM, the method proposed by NCLB (FNCLB), the method reached by agreement with the NGA (FNGAC), and the Adjusted Averaged Freshman Gradation Rate (AAFGR) (see Greene & Forster, 2003; Greene & Winters, 2005, 2006; Seastrom et al., 2005). It is only with accurate data and a clear picture of how definitions and calculations of a public high school graduate impact student outcomes that there can be a valid assessment of the nation's public schools. Teachers, administrators, and policymakers rely on this data to evaluate whether teaching and learning in high schools is improving, and to identify who is progressing, and who is at

risk of being left behind.

Theoretical Framework

This study used CRT to frame and interpret the empirical findings of this study. CRT underscores the socially constructed nature of race, belies liberalism, and challenges the “inherent belief in the law to create an equitable and just society” (Parker, 2003, p. 149). This premise is explicated in the review of literature and is essential to understanding the impact of race and racism in schools across America (Ladson-Billings & Tate, 1995). Discourse, such as this, challenges the intrinsic race-based inequities in educational policies and practices that continue to marginalize students of color.

Research Questions

In order to answer this study’s research questions the AAFGR, FSRM, FNCLB, and FNGAC (graduation rate calculation methods) were contrasted. The overarching research question asked is: How does Florida’s definition and subsequent calculations of a public high school graduate impact its students, particularly those of color? The research questions and null hypotheses below are a subset of the overarching question.

1. Is there a difference among graduation rates relative to student race (White vs. Black vs. Hispanic)?
2. Is there a difference among graduation rates relative to graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC)?
3. Is there a consistent difference among graduation rates relative to student race (White vs. Black vs. Hispanic) and graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC)?

Null Hypotheses

H₀1. There is no difference among graduation rates relative to student race (White vs. Black vs. Hispanic).

H₀2. There is no difference among graduation rates relative to graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC).

H₀3. There is no consistent difference among graduation rates relative to student race (White vs. Black vs. Hispanic) and graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC).

Overview of the Research Design

This study utilized Repeated Measures research designs and Analyses of Variance (ANOVAs) to determine whether a significant and consistent difference existed among Florida's public high school's graduation rates relative to student race and graduation rate calculation methods. Second, Critical Race Realism was used to analyze the quantitative findings of this study in order to reflect on the disparate impact of Florida's definition of a high school graduate and the resulting graduation rate calculation on students of color . Florida's public school districts served as the data points for this investigation.

Assumptions

FLDOE provided FSRM, FNCLB, and FNGAC data along with the required high school completer and adjusted student enrollment data to compile an AAFGR for AY 2004-08. These data were presumed accurate and reliable.

Limitations

The results of these calculations (AAFGR, FSRM, FNCLB, and FNGAC) did not provide a definitive answer as to which method is better suited to accurately portray a public high school graduate. Likewise, the calculations and analyses were not intended to answer why students are not graduating from high school. Variables that impact students' educational performance, such as economic status, teacher quality, education funding, and differences in program offerings, were not a part of this study. Also, FNGAC data for AY 2004 were not available as the compact with the NGA was reached in 2005.

Delimitations

This research was limited to the state of Florida for several reasons. First, the *Schroeder* (2008) complaint provided a cogent rationale to study the state using data provided by FLDOE. Second, the state enjoys broad student diversity, which provided the study with the contrast in the demographics of students, who graduate with standard diplomas, as *Schroeder* (2008) suggested. Third, Florida's public school districts vary in size and locale. This provided diverse district contexts. Next, developmental research school districts, defined by state statutes and housed on the campuses of four public universities along with districts that serve special populations (such as children who are deaf, blind, and mentally disabled) were excluded from this study. Last, Florida possesses a longitudinal student database, which facilitated the use of the proposed graduation calculation method, the AAFGR. Not all states have data systems sufficiently robust to do so.

The current research on the definition and calculation of a public high school graduate identified a number of graduation rate calculation methods. This study assessed four. The intent was to generate sufficient results to compare graduation rates, and their respective methodologies, in order to reveal who is and is not counted. It was beyond the nature and scope of this study to answer definitively which method, among those examined, was the most accurate in its assessment of students who received standard high school diplomas.

In the fall of 2002, states were required to report student achievement at the district and school level. The data were required to be statistically sound and disaggregated based on students' race or ethnicity, socioeconomic status, disability, and English proficiency (NCLB, 2002). In alignment with the terms defined by NCLB and based on the foci of this investigation, this study was limited to White, Black, and Hispanic student subgroups. Throughout this study the terms African American and Black were used interchangeably. Moreover, this study did not purport that *all* of Florida's Black and Hispanic students are less academically inclined in comparison to their White counterparts. It does, however, recognize that equal access to education is conducive to equality of opportunity and economic prosperity. And that the present day effects of race-based injustices are predicated by America's past.

Definition of Terms

The following definitions clarify concepts and terminology used in the study:
Adjusted Averaged Freshman Graduation Rate (AAFGR) (see Greene & Forster, 2003; Greene & Winters, 2005, 2006; Seastrom et al., 2005): Based on longitudinal data

obtained from the FLDOE, the AAFGR was calculated by dividing the number of standard diploma recipients in a given year by the number of (adjusted) students enrolled in grade 8 five years earlier, grade 9 four years earlier, and grade 10 three years earlier.

Adjusted Cohort Graduation Rate (ACGR): Introduced by Jay Greene in 2001, the ACGR compares the number of students who graduate on time with a regular diploma to first time 9th grade students four years earlier. This method is adjusted to account for students who transfer in and out of their respective school settings.

Averaged Freshman Graduation Rate (AFGR): Compiled using current data generated by National Center for Educational Statistics (NCES), the AFGR is calculated by counting the number of regular diploma recipients in a given year divided by the number of averaged students enrolled in grade 8 five years earlier, grade 9 four years earlier, and grade 10 three years earlier (Seastrom et al., 2005).

Basic Completion Rate (BCR-8): Constructed by Warren (2005) and deemed by many to be the simplest and most accurate method to assess graduation, the BCR-8 uses grade 8 student enrollments to calculate high school graduation rates by comparing the number of diplomas issued to the membership of the eighth grade class 5 years earlier.

Critical Race Theory (CRT): Founded on the legal scholarship of Derrick Bell (1980), CRT is defined as “legal theory of race and racism designed to uncover how race and racism operate in law and society” (Parker & Lynn, 2002, p. 7).

Cumulative Promotion Index (CPI): Developed by Swanson (2003) and recommended by the NGA Compact, this methodology calculates high school graduation as a four-year

progression, from grades 9 - 12, and is based on the award of a standard diploma.

Current Population Survey (CPS): Conducted by the United States' Census Bureau for the Bureau of Labor and Statistics, the CPS was designed to provide a representation of the nation's economic and demographic status. It is a self-reported survey that asks people if they or someone in their household are in receipt of a high school diploma or its equivalent.

Exclusion-Adjusted Cohort Graduation Indicator (EACGI): Introduced by Christopher Swanson in 2003, the EACGI assesses high school graduates by counting the number of first-time students in grade 9, in addition to students, who in grades 10 - 12, transfer into a school setting and graduate on time.

Florida's High School Graduation Calculation Method Generated to Comply with the National Governor's Association Compact (FNGAC): Florida counts students who graduate within four years with standard diplomas along with those students who receive special diplomas as high school graduates.

Florida's Modified Graduation Rate: Generated to comply with NCLB legislation (FNCLB), this calculation method counts those students who graduate within four years with standard diplomas and those who receive GEDs as high school graduates.

Florida's Self-Reported High School Graduation Calculation Method (FSRM): Florida counts those students who graduate within four years with standard diplomas along with those who receive special and GED diplomas as high school graduates.

Sherman Dorn's High School Graduation Calculation Method: Dorn's formula for calculating high school graduation rates is based on FSRM. However, it "corrects for

several of the inaccuracies in Florida's method for calculating high school graduation rates. These adjustments include correcting for Florida's inappropriate removal of W26 students from the cohort and Florida's inclusion of non-standard academic diplomas in its graduation rates" (Schroeder, 2008, p. 9).

Special Diploma: A diploma issued to high school students with properly identified learning disabilities (Beech, McKay, & Pankaskie, 2005).

Standard High School Diploma (SHSD): A diploma issued to students who successfully complete grades 9-12, in four years, based on the issuing state's academic content standards.

Chapter Summary and Organization of the Study

This study investigated Florida's definition of a public high school graduate and subsequent graduation rate calculations. Chapter 1 introduced the context of the study along with the research questions and null hypotheses. This was followed by an explanation of the purpose and significance of the study. After an introduction to CRT, which serves as the theoretical framework for this investigation, the concepts and terminology used in the study were clarified.

Chapter 2, the literature review, articulates CRT and discusses its relevance to the study. Then, historical narratives explain Black America's inextricable link to public education while connecting this focal relationship to jurisprudence. The federal government's role in public education and its influence on educational policies are also explained. Next, NCLB's definition of a public high school graduate is posited. This is followed by six graduation calculation methods and research literature on the dropout

crisis. Last, Florida's calculations of a public high school graduate are delineated along with the GED examination.

Chapter 3 details the study's research design and the use of Critical Race Realism as a methodological framework. This chapter also explains the role of the researcher and the methods used to calculate and analyze the data. A description of the statistical analysis performed in this study serves to conclude this chapter. Chapter 4 presents the statistical results of the study, relative to the variables *race* and *graduation calculation methods*, for AY 2004-08.

Chapter 5 reframes the empirical findings of this study through the lens of Critical Race Realism. Specifically, the racialized impact of Florida's definition and subsequent calculations of a public high school graduate are discussed. This chapter also contains this study's conclusions along with implications and recommendations for policymakers.

CHAPTER 2: REVIEW OF THE LITERATURE

In the landmark desegregation case, *Brown v. Board of Education* (1954), the U.S. Supreme Court determined that when a state endeavors to provide public education, such opportunity must be made available to all citizens on equal terms (Patterson, 2001). Based on the Court's ruling, many people of color believed that access to *equal* educational opportunities would give flight to their dreams. To date, the American dream, for the most part, has eluded Black America.

Schroeder (2008) alleged the considerable disparity in graduation rates among Black and Hispanic students and their White counterparts in SDPBC to be deleterious and characterized students who fail to attain a high school diploma as “significantly less able or likely to share the American dream” (p. 2). This study sought to investigate Florida's definition and subsequent calculations of a public high school graduate. It was also designed to determine whether statistically significant and consistent differences exist among graduation rates relative to student race and graduation rate calculation method. This study serves a deep purpose and has the potential to inform existing debates surrounding Florida's accountability efforts for its public high school graduates while improving the academic outcomes of *all* students.

A variety of methods were employed to locate appropriate materials for this review of literature. Based on the advice of preeminent scholars, personal narratives, public discourse, and jurisprudence related to Black America and education were

examined. Florida Atlantic University's databases were also queried to locate dissertations, peer-reviewed journal articles, and case law applicable to this study. The following search terms were used to direct the query: *Critical Race Theory, General Welfare Clause, Elementary and Secondary Act of 1965, No Child Left Behind Act, the achievement gap, high school graduation rates, and the dropout crisis*. FLDOE's website also proved to be a crucial source of information, affording longitudinal high school completion data, district-level student enrollment data, and relevant data on Florida's GED recipients.

This literature review was organized into four parts. It begins with an introduction to CRT. This theory was invaluable to this study as it served as the theoretical framework and is fundamental to the study's methodological design. The origins and five tenets of CRT are delineated along with a summary of Bell's (1987) allegory, which explored the permanence of racism and the constitutional contradiction. The purpose here is to contextualize the historical realities experienced by people of color, specifically Black America. The second part of this chapter postulates Black America's inexplicable link to public education as revealed in the narratives of seminal African American scholars. The impact of jurisprudence on Black America is then presented in pivotal rulings, which changed the face of public education.

The federal government's role in public education is contentious. In the third part of this literature review, federal policies enacted to improve education for historically underserved children, namely the Elementary and Secondary Educational Act (ESEA) (1965) and NCLB (2002), are explicated. One of the crucial points in this discussion is

NCLB's statutory definition and calculation a public high school graduate. This is followed by a discussion of six graduation calculation methods along with discourse, which refuted the accuracy of several means used to calculate graduation rates. National, collaborative efforts proposed to account for the nation's graduates were also explored and are presented along with literature on the dropout crisis. The purpose here is to illustrate the racialized effects of policies intended to improve and increase student achievement.

The fourth and final part of this literature review provided a comprehensive explanation of Florida's definition of a public high school graduate and of its graduation rate calculation methods. A historical account of the GED test and Florida's GED examination is also detailed. Last, the allegations raised in *Schroeder* (2008) are revisited. The central position postulated in this review of the literature is how federal jurisprudence requires *equal* protection for all students, yet encourages, like *Brown*, many unequal and "unintended" consequences (Tillman, 2004).

Critical Race Theory

Racism is a fact of life for people of color in America (DuBois, 1903; Bell, 1980). To combat this reality, scholars of color created CRT. Delgado and Stefancic (2001) found CRT "not only tries to understand our social situation, but to change it; it sets out not only to ascertain how society organizes itself among racial lines and hierarchies, but to transform it for the better" (p. 3). In this section of the literature review CRT is elucidated. The chapter continues as follows: (a) The Origins of CRT, (b) The Permanence of Racism, (c) The Constitutional Contradiction, and (d) Five Basic Tenets.

The Origins of CRT

CRT was born in remonstrance of the Critical Legal Studies (CLS) movement (Crenshaw, Gotanda, Peller, & Thomas, 1995). This movement gained prominence during the early 20th Century and can be traced back to American Legal Realism (Leiter, 2002). CLS was defined as a “movement within the law of mostly White Marxist and postmodernist legal scholars who were attempting to uncover ideological underpinnings of American jurisprudence” (Parker & Lynn, 2002, p. 9). CLS scholars examined the contradictory nature of legal doctrines and successive practices.

Derrick Bell, a legal scholar and civil rights advocate, is considered by many to be CRT’s “intellectual father figure” (Delgado & Stefancic, 2001, p. 5). Bell’s inspiration for critical legal discourse was shaped by his experiences as an African American. He believed that the CLS movement failed to adequately address the effects of racism in the law and its systemic and debilitating effects on people of color. Moreover, Bell (1980) and soon other critical race scholars (Crenshaw, 1988; Delgado, 1984; Matsuda, 1987) were concerned with the dawdling progress of racial reform after the civil rights movement, which he deemed “a spiritual manifestation of the continuing faith of a people who have never truly gained their rights in a nation committed by its basic law to the freedom of all” (1987, p. xi). Bell purported that racism in America was substantiated by the slave trade in conjunction with the nation’s founding fathers.

The Permanence of Racism

Bell (1980) defined the “permanence of racism” as a reality for people of color in America. He posited, “A major function of racial discrimination is to facilitate the

exploitation of black labor, to deny us access to benefits and opportunities that would otherwise be available” (2004, p. 71). Its present influence is demonstrated by the marginalization and subjugation of people of African descent. Bell’s (1987) explication of the permanence of racism is delineated by the Framers of the Constitution, who quantified their whiteness, safeguarded their wealth, and preserved their new nation by depriving people of color of the inalienable rights guaranteed by the federal Constitution of 1787.

This precept is articulated in the fictional work, *And We Are Not Saved* (Bell, 1987). In the text, owed to *Brown* and the civil rights movement, Bell stages a conversation between the architects of the Constitution, James Madison and George Washington among them, and the protagonist – Geneva Crenshaw – an African American civil rights lawyer from the twentieth century. The heroine’s charge was to persuade the delegates to omit slavery from the Constitution.

The Constitutional Contradiction

In the prologue of the allegory, Bell explained, “I take the liberty of tampering with time and history to examine the original contradiction in the Constitution of the United States—a contradiction that is at the heart of the blacks’ present-day difficulty of gaining legal redress” (Bell, 1987, p. 7). After being transported to the Constitutional Convention of 1787, Geneva finds herself at first attacked, then challenged, and lastly uncharacteristically dismissed as the delegates remained convinced that while the “Negro problem” may be a consequence of the Constitution, such a contradiction was their only resolution.

The narrative begins with Crenshaw's ethereal arrival at the Convention where she first startles and then is attacked by a handful of attendees. One attempts to slash her with his sword while others attempt to tackle her to the floor. Another more calculating delegate attempts to shoot Geneva. However, "thin veiled bars of red, white, and blue light" (Bell, 1987, p. 27) serve to encapsulate and protect Bell's main character from her aggressors.

Once order is restored, Crenshaw makes a plea to the policymakers. She argues that by sanctioning slavery, the Constitution legitimizes the denigration and subjugation of people of color throughout America's history while unequivocally endowing the rights of the majority populace and, yet, simultaneously pledging liberty for all (Bell, 1987). After Crenshaw's monologue, a few delegates express some semblance of remorse at the realities predicated by the inconsistencies established in the Constitution. Nonetheless, many Framers believe a creation of an inferior race of people is needed to insure America's economic success and delineate property (an intrinsic value) in whiteness.

The constitutional contradiction was essential in mending the then mounting divisive political chasm between poor White settlers and wealthy White landowners that threatened the stability of a young nation. For the Framers, the logical resolution to the potential rift rested in the form of slavery:

The solution came naturally and without decision. The planters purchased more slaves and imported fewer English servants. Slaves were more expensive initially, but their terms did not end, and their owners gained the benefits of the slaves' offspring. Africans, easily identified by color, could

not hope to run away without being caught. The fear of pain and death could be and was substituted for the extension of terms as an incentive to force the slaves to work. (Bell, 1987, p. 39)

The Framers felt justified in the inherent but necessary contradiction founded in the Constitution. This document was a compromise, which institutionalized racial inferiority while encouraging individual liberty – truly a contradiction. As a result of this reality, America’s history bears the shame of slavery and the impermeable stain of racism (Bell, 1987).

Five Basic Tenets

Richard Delgado and Jean Stefancic are often-cited CRT scholars. Their work has helped to shape Latino Critical Theory (LatCrit), an off-set of CRT designed to highlight the marginalization of Latinos in jurisprudence (Haney-López, 1998), and has challenged Whiteness as both a social and political reality (Lynn & Parker, 2006). The scholars proposed five basic tenets for CRT that serve to objectify the theory while providing the tools that may be used to dismantle the master’s house (Lorde, 1984). They are: (a) ordinariness, (b) interest convergence, (c) social construction, (d) differential racialization, and (e) legal storytelling.

Ordinariness. Foremost is ordinariness; it is synonymous to the permanence of racism (Bell, 1980). This concept stands in stark contrast to the naive color-blind theory held by many non-marginalized people. Those who prescribe to this theory view race as neutral. With a color-blind lens, everyone is always treated the same at all times, devaluing Black America’s tumultuous past and the vestiges of slavery held by both the

former slave and the former slaveholder. Ordinariness acknowledges racism as deeply embedded in “ordinary” life (Delgado & Stefancic, 2001).

Interest convergence. The premise of interest convergence was first addressed by Bell (1980). It is the belief that non-marginalized people will only act on the behalf of marginalized people if they stand to benefit the most. In the article, *Brown v. Board of Education and the Interest-Convergence Dilemma*, Bell (1980) expounded upon his belief that the historic *Brown* decision was not due to the altruistic nature of White people; rather, it was a calculated move by “those whites in policymaking positions able to see the economic and political advances at home and abroad that would follow the abandonment of segregation” (p. 4). Hence, the tenet of interest convergence contends that White people will typically advance the interests of people of color when it is a byproduct of advancing their own self-interests.

Social construction. The social construction tenet of holds that race is a man-made ideal that serves a societal purpose (Crenshaw et al., 1995; Delgado & Stefancic, 2001; Omni & Winant, 1994). Accordingly, race is socially constructed concept that is used by the White majoritarian culture as a social, economic, and educational barrier for people of color. As such, law and policy can be deconstructed, revealing them to have a racist purpose (López, 2003; López & Parker, 2003).

Differential racialization. Similar to the tenet of social construction, the principle of differential racialization focuses on the ways in which different people of color have been marginalized differently over time. “Critical writers in law, as well as social science, have drawn attention to the ways the dominant society racializes different minority

groups at different times, in response to shifting needs such as the labor market” (Delgado & Stefancic, 2001, p. 8). As a result, it is necessary to pay close attention to the ways that each “minority” racial group was treated differently in varying historical contexts so as to understand the tools and effects of racism.

Legal storytelling. Finally, legal storytelling was found to be an effective way to counter the master narratives used by policymakers to frame an experience or policy outcome that is a far cry from the reality that people of color experience. Legal storytelling offers differing paradigms, counter-narratives, which can be used as tools to redress the inequities many educational policies serve to perpetuate (Delgado & Stefancic, 2001). Rather than being seduced by master narratives like color blindness, people of color construct counter-narratives that reveal their humanity and the fundamental racism embedded in race-based policies.

Racism is founded on the demarcation of race. CRT scholars present cogent arguments, which justify race as a social construct and frames the way a collective people may see the world. Such an occurrence is essential to CRT. I would be remiss if I failed to mention that, to date, CRT is not solely a Black-White paradigm. As a result of its inception, other non-majority (and majority) populations have used this mode of inquiry to understand, interrogate, and improve their realities.

In an effort to address the racialized experiences of other communities, CRT has been expanded to incorporate Latino Critical Theory (LatCrit); Asian Critical Theory (AsianCRT) (Delgado & Stefancic, 2000, 2001; López & Parker, 2003); Tribal Critical Race Theory (TribalCrit) (Brayboy, 2005) as well as Feminist Critical Theory (FemCrit)

and Queer Legal Theory (QueerCrit) (Caldwell, 1995; Wing, 2000). Additionally, White scholars have extended CRT to include White Critical Race Theory (WhiteCrit). This facet of the theory exposes racism as a pandemic and focal point of a society founded on an epistemology of White racial dominance (Delgado & Stefancic, 2000; Scheurich & Young, 2002).

Black America and Public Education

It is important to acknowledge the significance of the relationship between Black America and public education in order to understand the concern over inequitable educational opportunity and to link that significance to the study of multiple methods of calculating graduation rates. Likewise, such a correlation provides a foundation for understanding the utility of applying a Critical Race Realism framework (Bell, 1980; Houh, 2005; Parks, 2006) to analyze Florida's graduation rate calculation methods. This section briefly reviews the works of early Black scholars who spoke of the necessity of public education to improve the lives of African Americans and then covers the seminal jurisprudence, which established segregation, upheld segregation, and ordered desegregation.

The Beginnings

Illiteracy is a cornerstone of slavery. Initially, people of color were prohibited from attaining a formal education throughout much of America. In fact, if an enslaved African American were caught learning to read or write, the teacher and the student were subject to harsh consequences (Marable, 1983). However, despite its once dire corollary, Black America has always deemed education analogous to freedom and has sought

equitable access to educational systems (DuBois, 1903).

Education is a potent resource. Freire (1998) defined it as a liberating force, which provides access to social integration and economic wellbeing. DuBois was found to have noted education to be “a two-edged sword, which could be used either to liberate or subjugate specific social and cultural groups” (Provenzo, 2002, p. 4). There are examples in which governments (such as that of apartheid South Africa, of colonizing nations, and even of early state governments in America) deprived categories of citizens and non-citizens of either an education or have used education to assimilate them to the status quo.

There are historical instances in which oppressed or enslaved people, such as Frederick Douglass, received an education and went on to national and world prominence. Douglass was a former slave who used his scholarship to become an abolitionist. He was able to couple the rudimentary teachings of his owner with lessons exchanged for bits of bread and a handful of marbles to literally write his pass to freedom (Douglass, 1845). This example aligns to what Horace Mann, known to many as the father of American education, believed education to be, “the great equalizer” (Cremin, 1957). For in all of society’s resources, education is thought to be the only tool she may use to improve her political, social, and economic condition.

Unfortunately, Douglass’ story is an anomaly, and much of America’s history in regards to the political, social, and economic opportunities thought to be garnered through successful educational attainment exemplifies the nation’s dark past, and has evaded a sizeable populace of Black America. Carter G. Woodson, in his groundbreaking

text, *The Miseducation of the Negro*, called upon Black America to establish its own agenda as it pertains to public education.

Woodson (1990) found the educational systems in America and abroad to be guilty of “miseducating” people of color in order to maintain the status quo. He contended:

The so-called modern education, with all its defects, however, does others so much more good than it does the Negro, because it has been worked out in conformity to the needs of those who have enslaved and oppressed weaker peoples. For example, the philosophy and ethics resulting from our educational system have justified slavery, peonage, segregation, and lynching. (p. ix)

Moreover, Woodson believed “educated” African Americans to unwittingly perpetuate racist and self-deprecating attitudes that serve to hinder the Black community from opportunities typically aligned with educational attainment. As an antidote to their condition, Woodson called upon scholars of color to look back at their rich history as a source of pride, strength, and self-respect while discarding the propaganda taught in White institutions, which tolerated rather than taught them.

DuBois (1935) agreed with Woodson’s conclusions. He, too, found America’s public school systems to be dual, biased, and unjust. DuBois found many white institutions to harbor racist sentiments that left them indifferent, if not hostile, to their students of color. DuBois also noted that the “main problem of Negro education will not be segregation but self-knowledge and self-respect” (p. 331). For even with inherent

disparities in school funding, many schools operated by African American educational leaders provided a curriculum and environment that rivaled many of their White counterparts (Siddle-Walker, 1996). Despite this observance, Black institutions were believed to face a stigma as many people of color were found to lack faith in educational leaders who looked like them. As a result, they chose schools where they were “admitted and tolerated, but they [were] not educated; they [were] crucified” (DuBois, 1935, p. 329).

Based on this perspective, racism is a construct that has subjugated those of African descent (Bell, 1980). DuBois deemed the vestiges of slavery along with the social manifestations of racism a problem. In his seminal work, *The Souls of Black Folk*, DuBois (1903) revealed the dichotomy people of color face in America:

Herein lie buried many things which if read with patience may show the strange meaning of being black here in the dawning of the Twentieth Century. This meaning is not without interest to you, Gentle Reader; for the problem of the Twentieth Century is the problem of the color-line.
(p. 3)

DuBois married the experiential and ideological effects of race and racism, extrapolating the dual lives people of color are forced to live in America. The ideas of DuBois are essential to understanding the realities Black Americans face every day as they attempt to reconcile their existence as “both a Negro and an American, without being cursed and spit-upon by his fellows, without having the doors of Opportunity closed roughly in his face” (p. 9). Unfortunately, more than 100 years later, people of color still grapple with

the problems they faced at the start of the prior century, especially in public education.

In no other entity is America's subjugating discrimination more prevalent than in public education (Orfield & Eaton, 1996). This truth has marred the merits of legal decisions that were once thought by many to promulgate egalitarian values espoused by educational reformers who argued that public schools could shape a democratic populace in America. Dewey (1938) argued such objectives to be the goal of public education along with the development of reflective, creative, responsible thought. Ironically, while some celebrated the promise of the historic *Brown* decision, others questioned its true intent (Bell, 1980). Tillman (2004) argued that the *Brown* decision resulted in many "(un)intended" consequences, including the displacement of many African American teachers, principals, and superintendents that proved to nearly cripple the Black community. To date, the blatant disparities in educational attainment between Black and White students are eminent throughout America's public school systems (Kozol, 1991, 2005).

Despite the realities chronicled by DuBois and Woodson and the disillusionment following *Brown*, Black America remained steadfast in their belief that "book-learning" (DuBois, 1903) was the pathway to Canaan (freedom) and sought help from the judiciary system to enforce the equality that some White men and even some Black people could not seem to understand (DuBois, 1935; *Roberts v. Boston*, 1850; Woodson, 1990).

Black Education and Jurisprudence

In 1850, Benjamin Roberts filed the first suit in the city of Boston, which challenged the state's segregated and discriminatory educational system. Roberts' then

five-year-old African American daughter passed four white schools as she walked to her mandated school. The all-Black school she was required to attend was further from her home and in poorer condition in comparison its White counterparts. The Massachusetts Supreme Court deemed Roberts' case without merit, and the legal doctrine "separate but equal" in Massachusetts was born (Ladson-Billings, 2004).

The U.S. Supreme Court followed Massachusetts' lead and federalized "separate but equal" in a transportation case, *Plessy v. Ferguson* (1896). This decision provided the legal foundation for those states that wished to enforce racial segregation through such means as maintaining dual public school systems. In the suit, Plessy's lawyer argued his case on the basis of 14th Amendment's guarantee of equal protection. He cited the branding of inferiority on people of color that the Court's sanction of segregation would communicate throughout society. In the majority opinion, Justice Brown argued that racial discrimination could not be overcome by legislature. In contrast, the lone dissenter, Justice Harlan, declared the Constitution to be "color-blind" and expressed supreme discomfort with the high Court's ruling that denied equal liberties to citizens on the singular basis of their race (*Plessy*, 1896).

Although the NAACP worked methodically to change this (Patterson, 2001), *de jure* discrimination in public and higher education functioned in the United States for nearly 60 years until the U.S. Supreme Court took up another public education case, *Brown v. the Board of Education* (1954). The Court's historic ruling struck down the "separate but equal" doctrine. With this, many people of color were convinced that desegregated schools would make the American dream accessible to all (Bell, 2004;

Orfield & Eaton, 1996; Patterson, 2001). Regrettably, the promises of full equality in educational opportunity that *Brown* implied did not come to fruition and many African Americans post-1954 are subject to the harsh realities of the pre-*Brown* era (Ogbu, 2003).

Current scholarship, some of which was produced in honor of the 50th anniversary of *Brown*, found the color-blind principle espoused by Justice Harlan in *Plessy* and the equality sought as a result of the *Brown* decision to be unrealistic in a society that once subjugated a populace and has yet to escape the shadow of slavery (Crenshaw, 1988; Ladson-Billings, 1998). Moreover, many educational activists have attempted to call attention to the “quiet” reversal of the *Brown* decision, noting the subtle trends in school resegregation (Orfield & Eaton, 1996; *Parents Involved in Community Schools v. Seattle School Dist. No. 1*, 2007).

The use of CRT in this literature review and study is a result of my reality as an African American educational leader. As proposed by CRT activists and scholars, racism is embedded in all educational, political, economic, and societal facets. In this light it is reasonable, then, to continue this literature review with an exploration of the development of public education and its governance.

The Federal Government and Public Education

While public education is preserved by national governments worldwide, in the United States, education is neither considered a fundamental right under the federal constitution (*San Antonio Independent School District v. Rodriguez*, 1973) nor under direct control of Congress (U.S. Const. amend. X). Despite this fact, the federal government has had input into states’ educational policies by invoking the authority to do

so primarily under the General Welfare Clause of the U.S. Constitution (U.S. Const. art. I, § 8).

The General Welfare Clause is also referred to as the Spending Clause. Its purposefully vague wording has been construed to afford the federal government the power to collect taxes and distribute public money for the general welfare of its citizens (see *Helvering v. Davis*, 1937). State governments rely on the U. S. Supreme Court to protect the states' right to choose not to receive federal monies in exchange for adhering to federal legislation that may trespass on state policy domains "if the conditions are educationally, financially, or legally offensive" (*Wheeler v. Barrera*, 1974, cited in Alexander & Alexander, 2009, p. 77). And while binding, undue federal constraints on state decision-making solely based on states accepting federal monies, may be restricted (*South Dakota v. Dole*, 1987).

The federal government has indirect yet considerable influence over education policies when states accept attached federal dollars. Federal education policies and ensuing practices are often cemented through litigation. To better understand how the federal government has impacted public education, a brief look into the antecedents of NCLB (2002) is helpful.

Elementary and Secondary Education Act (ESEA)

With ample research clearly indicating that poverty is often coupled with poor student achievement (Bennet et al., 2004), the federal government, in 1965, formulated what was then the largest and most ambitious piece of federal education legislation ever proposed, the ESEA. Under Title I of the ESEA, the newly enacted legislation "operated

narrowly to support the states in paying the extra costs of educating ‘educationally disadvantaged’ students” (Liguori, 2006, p. 6). The act was structured to aid local school districts in their efforts to improve student performance in schools with sizeable populations of children from economically disadvantaged backgrounds.

The ESEA endorsed theories proposed by standards-based education reform initiatives. These theories were based on the belief that high expectations and expressed goals result in success for all students. The ESEA promoted an increased focus on reading and mathematics by identifying how well students were learning and when they might need extra assistance. Under ESEA, each state used data from annual assessments to determine how a student was performing on a year-to-year basis and to help schools diagnose and meet the needs of each student. These data also assisted educational leaders at the state and local levels with critical information about which schools were meeting proficiency based on statewide standards.

Nearly 30 years later this legislation was amended with the Improving America’s Schools Act of 1994. This revised decree served to hold students who participated in Title I funded programs accountable to the same academic standards as other students, regardless of their economical and educational conditions (Liguori, 2006). To date, the ESEA has been amended eight times. NCLB is the most recent reauthorization of ESEA and is the nation’s most aggressive effort to improve the educational outcomes for all of its children.

The No Child Left Behind Act (NCLB)

The No Child Left Behind Act of 2001, the most recent reauthorization of ESEA, promulgated a number of federal programs aimed at improving the performance of primary and secondary schools by increasing the standards of accountability for states, school districts, and individual schools. NCLB increased districts' flexibility to use Title I resources where they were needed most. Additionally, NCLB provided parents with the ability to choose which schools their child would attend once the state determined that their home school was in need of improvement. The law also required each state to supply parents with information about the quality of their child's school, about the qualifications of their child's teachers, and about their child's progress in key content areas.

Under NCLB, each state has the responsibility to decide what its students should learn at each grade level. Based on the identified competencies, individual states must then develop rigorous academic standards, which drive the curriculum and subsequently drive the instruction. Annual statewide assessments must align with the curriculum to provide an external, independent measure of what is being taught in the classroom. The results of these assessments should direct resources for instructional activities such as after-school tutoring and summer school for those students who are falling behind.

To ward off potential state concerns that the federal government was attempting to diminish the state's authority over public education through NCLB, Congress left it to the states to devise appropriate curricula, standardized tests, pass rates, and methods for calculating graduation rates. However, this nod to state control over education has

generated inconsistency and variety in developing state standardized tests, in setting pass rates, and in determining graduation rates. Such diversity among the 50 states makes it difficult to ascertain what and who is successful and to compare those results across states. The following sections describe the accountability requirements of NCLB and the kinds of decisions that rest with states in meeting those requirements.

Adequate Yearly Progress

NCLB requires each state to establish a definition of AYP to use each year to determine the achievement level of each of its school districts and schools. The definition of AYP is diagnostic in nature as it was intended to highlight where schools need improvement and where they should focus their resources. In addition, AYP requires the same high standards of academic achievement for all students. These standards should be statistically valid and reliable, continuous and substantial, and they should demonstrate academic improvement for all students. Separate, measurable, annual objectives for academic achievement should benefit all students and include a disaggregation of test scores for racial or ethnic groups, economically disadvantaged students, students with disabilities, and students who are English language learners.

Based on a sound statistical method, a state should determine and justify the minimum number of students sufficient to yield statistically reliable data for reporting assessment results and for identifying schools in need of improvement. Each of the aforementioned disaggregated groups of students should meet or exceed statewide annual objectives based on the criteria set by the state to determine if a school or district has met the objectives of AYP. Also, for each group, 95% of students enrolled should participate

in the assessments on which AYP is based. As student achievement is the key gauge of student performance under NCLB, at the secondary level, this indicator must be high school graduation rates.

Safe Harbor

AYP provides for a Safe Harbor provision, allowing schools that did not meet statewide goals to still make AYP. A school can still make AYP if a subgroup that did not meet its performance target decreases by 10% from the previous year. In other words, if a subgroup did not meet the proficiency target, the percentage of students below the proficiency target in that group in reading or mathematics must be reduced by, at minimum, 10% (NCLB, 2002).

Attention to the academic attainment of subgroups was a paramount function of ESEA and now NCLB. Darling-Hammond (2006) noted how Civil Rights proponents praised NCLB as a “step forward in the long battle to improve education for those children traditionally left behind in American schools – in particular, students of color and those living in poverty, new English learners, and students with disabilities” (p. 642). In the following section NCLB’s initial definition and suggested calculation of a public high school graduate is analyzed along with Florida’s explication of its public high school graduation rates.

High School Graduation Rates

High school graduation rates are critical indicators of the nation’s economic and educational health (Amos 2008; Heckman & LaFontaine, 2008; McKinsey & Company, 2009). Studies of America’s graduates have documented the disparity in the graduation

rates among White, Black, and Hispanic students (Balfanz & Legters, 2004; Orfield et al., 2004; Swanson 2004).

NCLB's Definition and Suggested Calculation

NCLB defines a high school graduate as one who has received a standard high school diploma on time with her/his cohort. The Act offers the following method of calculation for states to determine their high school graduation rate:

The percentage of students, measured from the beginning of high school, who graduate from high school with a regular diploma (not including an alternative degree that is not fully aligned with the state's academic standards, such as a certificate or a GED) in the standard number of years.

(Section 1111(b)(2)(C)(vi))

Besides this definition, and based on the approval of the Secretary of Education, states were given the latitude to define and calculate their graduates:

Another definition [of the high school graduation rate], developed by the State and approved by the Secretary in the State plan, that more accurately measures the rate of students who graduate from high school with a regular diploma as defined in paragraph (a)(1)(i)(A) of this section.

(§200.19(a)(1)(i)(B))

These guidelines have triggered extensive debates among experts. Many states are said to have far fewer graduates than reported based on divergent state-level definitions and calculations of a high school graduate (Dorn, 2006; Orfield, 2004; *Schroeder*, 2008).

As explained, while NCLB (2002) defines high school graduates as those who have received a standard high school diploma on time with their cohort, many states have challenged this federal definition and have utilized varying, and what former Secretary of Education Spellings deemed “loose” criteria, to assess their high school graduates. An unfortunate example of a state’s use of nebulous high school graduation criteria is evident in what was once dubbed the Houston Miracle.

The “Houston Miracle”

Once considered a marvel, the Houston Independent School District won the first Broad Prize for Urban Education based on its soaring graduation rates and impressive standardized test scores. Its superintendent, Rod Paige, was named Secretary of Education at least partially because of this apparent success (Heilig & Darling-Hammond, 2008). This feat, in a large urban district that consists of primarily Black and Hispanic students, was lauded throughout the nation. However, upon close scrutiny, the district was found to have manipulated its testing data and graduation rates. Heilig and Darling-Hammond (2008) found a stark discrepancy between what the district reported and what the researchers noted based on their cohort analysis of the district’s data:

Although BSCD [pseudonym] reported soaring graduation rates and high pass rates on the exit TAAS [Texas Assessment of Academic Skills] in 10th grade, our high school cohort analysis for those entering 9th grade in 1997 documented that only 33% of the cohort graduated within 5 years; that 49% had dropped out, withdrew, or disappeared from the data set . . . African Americans, Latinos, and LEP students had the lowest graduation

rates. (p. 106)

The school district constructed learning gains and graduation rates, disguising their ineffectiveness in teaching and graduating students of color. By doing so, the district sought to conceal and evade the equity gaps in their schools, socially constructing success with both standardized test scores and graduation rates. The result was that while students of color continued to be ill served by the Houston Independent School District, an appearance of educational success was communicated to the public at large. The Houston Miracle is another regrettable case in point that illustrates the need for a comprehensive and uniform high school graduation rate calculation method.

Graduation Rates: Methods, Complexities, and Possible Reform

In 2005, all 50 members of the NGA agreed to establish a uniform graduation rate calculation method. Daria L. Hall, the assistant director for K – 12 policies at Education Trust, a research and advocacy group aimed to close the achievement gap, identified the voluntary compact as a sign of progress (Education Week, 2008). However, several states have not implemented the method selected by the nation’s governors. Many states do not have the capacity to collect the kinds of data necessary to apply the method and others remain uncertain about whether and which universal method should be utilized to more accurately assess the nation’s graduation rates.

The varying methods and rationale employed by dozens of states across the nation to calculate their graduates have, accordingly, fallen under substantial scrutiny (Mishel & Roy, 2006; Roy & Mishel, 2008). While graduation rates for all students have shown a consistent decline since the late 1960s (Heckman & LaFontaine, 2008), Swanson’s

(2004) research revealed “an overall graduation rate of 68 percent. Even more troubling, there’s only a fifty-fifty chance for a student from a historically disadvantaged minority group to finish, the same odds as flipping a coin” (p. 1). If the nation is to reform its educational system, particularly as it relates to students of color, a uniform graduation rate calculation method that illuminates who is graduating with a standard diploma and an accompanying improvement plan that focuses on the educational needs of students who are at risk of leaving or finishing high school through alternative means are pivotal.

What follows is an exploration of six graduation rate calculation methods. These methods were selected as they, with the exception of the Current Population Survey (CPS), are based on various cohort methods. The NGA Compact committed all 50 states to take steps to implement a cohort-based method to calculate their high school graduates (2005). Additionally, cohort methods are identified as the most accurate unit of analysis in determining graduation rates (Pinkus, 2006; Swanson, 2003). Of the six methods selected, two require longitudinal data: the Adjusted Cohort Graduation Rate (ACGR) and Exclusion-Adjusted Cohort Graduation Indicator (EACGI). Three can be used with data obtained from a national database: the Averaged Freshman Graduation Rate (AFGR), the Basic Completion Rate (BCR-8), and the Cumulative Promotion Index (CPI). And last, the previously named CPS is a survey-based indicator, which affords a representative account of the nation’s high school graduates. The rates are as follows:

Adjusted Cohort Graduation Rate (ACGR)

Introduced by Jay Greene in 2001, and revised by Greene and Winters in 2005, the ACGR estimates the number of students who graduate on time with a regular

diploma:

$$\frac{AY2003SHSDAwarded}{\left(\frac{Grade8Fall98 + Grade9Fall99 + Grade10Fall00}{3} \right)}$$

This method divides an adjusted cohort, an averaged 9th grade class, garnered by adding the student body for grades 8, 9, and 10 divided by three. The nation's governors touted this method in 2005 because, like NCLB (2002), it defines a graduate as one who receives a standard diploma and it is based singularly on the award of on-time diplomas. However, while all states possess the data necessary to compute this formula, many do not have the requisite longitudinal database.

Moreover, while Pinkus (2006) found this mode of calculation appealing, she too noted it was not feasible for most of the nation's public school systems as most states do not possess longitudinal data systems, which contain the four following elements:

1. a unique statewide student identifier;
2. student-level enrollment, demographic, and program participation information;
3. student-level graduation and dropout data; and
4. a state audit system for assessing data quality, validity, and reliability. (p. 37)

Subsequently, while this method accounts for the "ninth grade bulge," a term coined by Roy and Mishel (2008) to account for the expanded student enrollment in grade 9, by averaging students in grades 8, 9, and 10, it is not feasible for most states due to the constraints of their databases.

Averaged Freshman Graduation Rate (AFGR)

Compiled using existing data generated by NCES for the United States Department of Education (USDOE), the AFGR is calculated by counting the number of regular diploma recipients in a given year divided by the averaged number of students in grade 8 enrolled 5 years earlier, grade 9 enrolled 4 years earlier, and grade 10 enrolled 3 years earlier (Seastrom et al, 2005):

$$\frac{AY2003SHSDAwarded}{\left(\frac{Grade8Fall98 + Grade9Fall99 + Grade10Fall00}{3} \right)}$$

While appearing to be similar to the ACGR, the AFGR uses data found in the Common Core of Data (CCD). The CCD is a database maintained the USDOE. Mishel and Roy (2006) found the calculations derived from the AFGR to be fallacious, as this method does not rely on school-based data. Rather, it is based on estimated data reported to the federal government by the individual states, who may not be able to accurately account for their students. The researchers argue that all new graduation rates calculated using data obtained from the CCD “impart significant downward bias to the estimates, the bias is much worse for Black and Hispanic graduates” (Roy & Mishel, 2008, p. 3). They attribute this bias to the size of the entering ninth grade class along with the student mobility during the high school years.

Basic Completion Rate (BCR-8)

Constructed by Warren (2005), the BCR-8 uses 8th grade student enrollment to estimate high school graduation rates by comparing the number of diplomas issued to the membership of the eighth grade class 5 years earlier, after an adjustment for student

migration, accounting for student transfers in and out of a respective school site:

Regular Diploma Recipients (Spring of Year X)

Estimated Number of First-time 9th Graders (Fall of Year X-3) – Migration Adjustment

The adjustment for student migration found in the BCR-8 is similar to the adjustment found in Greene and Winter’s (2005) revised AFGR. Such an adjustment offsets the two primary errors found in CCD based data by accounting for 9th grade retention and interstate migration.

Cumulative Promotion Index (CPI)

Swanson’s graduation rate calculation method was first introduced in 2003 and hypothesizes graduation calculations. Swanson (2004) noted that his formula “approximates the probability that a student entering the 9th grade will complete high school on time with a regular diploma” (p.14). Specifically, the CPI is:

$$\frac{(RD \text{ for } AY X) \times (EG12 \text{ for } AY X+1) \times (EG11 \text{ for } AY X+1) \times (EG10 \text{ for } AY X+1)}{(EG12 \text{ for } AY X) \times (EG11 \text{ for } AY X) \times (EG10 \text{ for } AY X) \times (EG9 \text{ for } AY X)}$$

Note: *RD* = Regular diploma recipients; *EG* = Estimated enrollment for Grade; *AY* = Academic Year.

This method requires data for only two academic years, is based on the award of a standard diploma, and calculates high school graduation as a four-year progression. Swanson (2004) estimated the probability of a freshman completing high school with a standard diploma, “given the conditions prevailing in that school system during the school year” (p. 3). He did this by calculating the percentage of promoted 9th graders by comparing the number of 10th graders to the number of 9th graders one year earlier.

Furthermore, this method calls for the same calculation for students in grades 10, 11, and 12 and then the multiplication of these four percentages to establish an estimated graduation rate.

Swanson's (2004) CPI is presumably less accurate than the ACGR as it does not rely on longitudinal data. Despite this perception, the CPI graduation rate calculation method is useful because it can provide timely data indicative of the current realities in schools, districts, and states that post-facto (longitudinal) data may be slow to report. For this reason, the CPI is recognized as a leading indicator of graduation rates and is used by the Education Trust and the Education Commission of the States (Hall, 2005).

Current Population Survey (CPS)

Conducted monthly by the Census for the Bureau of Labor and Statistics, the CPS is designed to provide a representation of the nation's economic and demographic status. It is a self-reported survey that asks people, among other questions, if they and /or someone in their household are in receipt of a high school diploma or its equivalent (U. S. Census Bureau, 2008).

The graduation rates rendered by the CPS have come under scrutiny as they do not account for people who are either homeless, incarcerated, or in the military. Additionally, these rates was found to be fallible as "many people may not discern the difference among a high school diploma, certificate of attendance, GED, or the completion certificate, and because people may not wish to identify themselves as dropouts" (Pinkus, 2006, p. 8). Based on the calculations rendered by the CPS, Mishel and Roy (2006) deemed the current graduation rate crisis to be an exaggeration as they

found survey-based results to be close to 80 % for all students and 75 % for students of color.

Exclusion-Adjusted Cohort Graduation Indicator (EACGI)

Often referred to as the NCES graduation task force rate, the EACGI formula assesses the number standard (four-year) graduates by counting the number of first-time students in grade 9 in addition to students in grades 10, 11, and 12 who transfer in and graduate on time divided by the cumulative entry cohort while excluding specified student populations (NCES, 2005). As defined by the NCES, the EACGI is:

The preferred indicator is of the generic form (1). Specifically, it is the exclusion-adjusted cohort graduation indicator (EACGI), which is a function of school S , cohort year Y_c and graduation year Y_g . It accounts in a principled manner for in-transfers, out-transfers, retentions, and other exclusions. The mathematical representation is:

$$\begin{aligned}
 & \text{Students entering 9}^{\text{th}} \text{ grade for the first time in } Y_c \text{ and graduating by } Y_g \\
 & + \text{Students transferring into 10}^{\text{th}} \text{ grade in } Y_c + 1 \text{ and graduating by } Y_g \\
 & + \text{Students transferring into 11}^{\text{th}} \text{ grade in } Y_c + 2 \text{ and graduating by } Y_g \\
 & + \text{Students transferring into 12}^{\text{th}} \text{ grade in } Y_c + 3 \text{ and graduating by } Y_g
 \end{aligned}$$

$$\begin{aligned}
 & (\text{Students entering 9}^{\text{th}} \text{ grade for the first time in } Y_c) - (\text{those excluded in } Y_c, \dots, Y_g) \\
 & + (\text{Students transferring 10}^{\text{th}} \text{ grade in } Y_c + 1) - (\text{those excluded in } Y_c, \dots + 1, Y_g) \\
 & + (\text{Students transferring 11}^{\text{th}} \text{ grade in } Y_c + 2) - (\text{those excluded in } Y_c, \dots + 2, Y_g) \\
 & + (\text{Students transferring 12}^{\text{th}} \text{ grade in } Y_c + 3) - (\text{those excluded in } Y_c, \dots + 3, Y_g)
 \end{aligned}$$

(p. 12)

Both lauded and criticized for its principle ability to exclude students, like the ACGR, the EACGI calls for longitudinal data (NCES, 2005). While the EACGI does not identify students specifically as ‘dropouts,’ its “calculation of a variety of derived indicators to allow for diversity of goals across or within states” (NCES, 2005, p. 12) was found to result in greater accuracy in accounting for the nation’s students.

When Calculations and Data Fail to Add Up

Today, a great debate exists among educational activists, economists, researchers, and sociologists regarding the variety and complexity of the methods used to calculate graduation rates (Greene & Winters, 2005; Roy & Mishel, 2008; Seastrom et al., 2005; Swanson, 2003; Warren & Halpern-Manners, 2007). In their attempt to factually portray the nation’s graduates, many advocates of education reform have developed their own methods to assess a state’s graduation rate utilizing statewide and federal databases.

Notably, Jay Greene and Christopher Swanson have developed comparable formulas (the ACGR and CPI, respectively). These graduation rate calculation methods omit what many consider the faulty incorporation of students who drop out of high school along with those who leave school to enroll in a GED program from their state’s graduation rate calculations (Hall, 2005; Hoff, 2006; Pinkus, 2006). Beyond what kinds of data are used in graduation rate calculation methods, there is even controversy over the source of the data.

A few studies have posited the hazards of using data obtained from centralized databases to gauge graduation rates (Mishel & Roy, 2006; Roy & Mishel, 2008). They have been particularly critical of the CCD, a data warehouse instituted by the USDOE.

They have argued that “the best one could do to calculate graduation rates using the CCD data is to compare the number of diplomas in a particular year, such as 2006, over the number of 9th graders in the fall of 2002” (Roy & Mishel, 2008, p. 12). While acknowledging the CCD as the primary source used by scholars and reformists to assess graduation rates throughout the nation, the economists have warned that the modifications applied to calculate graduates oftentimes exacerbate the graduation rates of historically underperforming student populations.

In addition, Roy and Mishel (2008) listed student mobility and the high retention of students of color in their freshman year of high school among the troubling realities that impede a faithful account of the nation’s graduates. Specifically, they stated:

There are several data limitations that frustrate this effort, including an inability to distinguish between on-time diplomas and late diplomas, difficulty in approximating the true size of the entering ninth grade cohorts, difficulty in estimating transfers in and out of school districts, and number of types of exit options including definition of regular diplomas which differ from state to state, making a straightforward comparison problematic and possibly misleading. (p. 3)

The high retention rates for members of the 9th grade class account for inflated student membership, which the authors have deemed “the ninth grade bulge.” In their efforts to account for this happening, many educational researchers have created methods to address the disproportionate amount of students in the 9th grade class (Greene, 2002; Seastrom et al., 2005; Warren, 2005).

A Possible Solution?

To combat the pervasive problem of calculating and accounting for America's public school graduates, the NGA agreed in July of 2005 to formulate a transparent and uniform system to calculate the number of graduates nationwide. The governors decided to utilize a consistent cohort method that more accurately accounts for all students who transfer in and out of the schools in their districts, counties, and provinces. The agreement calls for all 50 states to:

Immediately adopt, and begin taking steps to implement, a standard four-year, adjusted cohort graduation rate using the following formula:

Graduation rate = [on-time graduates in year x] ÷ [(first-time entering ninth graders in year x - 4) + (transfers in) - (transfers out)]. (p. 7)

As the formula indicates specific kinds of student data has to be collected, such as 9th grade enrollment, number of on-time graduates, and the number of transfers. This requirement presents barriers to full adoption. Prior to all states utilizing the agreed upon formula, more than half of the nation's schools and districts will need to build or increase the capacity of their longitudinal data systems (Data Quality Campaign & Achieve Inc., 2005; NGA, 2005).

In an effort to provide direction, the Data Quality Campaign (DQC) and the National Center for Educational Achievement (NCEA) conducted a nation-wide survey in August 2008 to assess the number of states with effective longitudinal data systems. They identified the following 10 elements as vital to a longitudinal data system:

1. A unique statewide student identifier that connects student data across key

databases across years.

2. Student-level enrollment, demographic and program participation information.
3. The ability to match individual students' test records from year to year to measure academic growth.
4. Information on untested students and the reasons they were not tested.
5. A teacher identifier system with the ability to match teachers to students.
6. Student-level transcript information, including information on courses completed and grades earned.
7. Student-level college readiness test scores.
8. Student-level graduation and dropout data.
9. The ability to match student records between P-12 and higher education systems.
10. A state data audit system assessing data quality, validity and reliability.

(DQC, 2008, n. p.)

By focusing on schools as systems, these elements were found to facilitate student achievement, best practices, and the effective evaluation of teaching training programs. To date, six states possess the identified characteristics. They are: Alabama, Arizona, Delaware, Florida, Louisiana, and Utah.

The Dropout Crisis

In 2001, a series of papers were commissioned and presented at the national Dropouts in America Conference. These talks were held at Harvard University and cosponsored by Achieve Incorporated, an amalgamation of business and political leaders

and The Civil Rights Project, a think tank of scholars focused on actualizing the promise of the 1960s Civil Rights Movement. The consortium called attention to the nation's escalating dropout rates and became a pivotal force in addressing this crisis.

After the Dropouts in America Conference, The Civil Rights Project funded research that was shared with Congress as NCLB was constructed (Orfield et al., 2004). In their discourse, the activists argued for increased state-level accountability and increased middle and high school dropout prevention efforts, with special attention focused on historically marginalized students. Based on their efforts Orfield (2004) reported, "Our ideas on dropout accountability and on defining dropouts were ultimately included in a portion of the No Child Left Behind Act" (p. 8). The advocates thought their analyses and presentations on what was dubbed The Dropout Crisis successfully informed policymakers of the adverse effects of lax state accountability efforts. While seemingly true, the definition and calculation of a high school graduate have become contentious and multifarious components of NCLB.

In *LOSING OUR FUTURE: How Minority Youth are Being Left Behind by the Graduation Rate Crisis*, Orfield et al. (2004) acknowledged the initial attempt by Congress to address the dropout crisis. Shortly thereafter however, the authors condemned NCLB for rendering its own efforts futile. They asserted:

Recently, Congress took a first step in recognizing the severity of the dropout problem in this country by including graduation rate accountability provisions in the No Child Left Behind, (NCLB) legislation enacted in 2002. Unfortunately, this provision is not being seriously

enforced, while provisions creating incentives for removing low-scoring students are rigidly followed. (p. 10)

Based on selective accountability efforts, many states were found to apply policies and incentives associated with student achievement that raised test scores of some students and caused others to drop out. These findings too are discouraging in light of the emphasis NCLB places on the academic efforts of low-income students and students of color.

In relation to the dropout crisis, Margaret Spellings, U.S. Secretary of Education under George W. Bush, went one step further and characterized the low rate of graduation nationally as a silent epidemic that has a significant impact on students of color and of low social economic status (U.S. Secretary of Education . . . Announces, 2008). Spellings found that the true nature of the crisis was unknown because not all school districts were transparent in how they calculated and reported graduation rates. She argued:

One reason that the high school dropout crisis is known as the “silent epidemic” is that the problem is frequently masked or minimized by inconsistent and opaque data reporting systems. For example, in some districts, a student who leaves school is counted as a dropout only if he or she registers as one. In others, a dropout’s promise to get a G.E.D. at an unspecified future date is good enough to merit “graduate” status. With such loose definitions of what it means to graduate, it’s no wonder this epidemic has been so silent! (n.p.)

Consequently, how a high school graduate is defined, calculated, and what those calculations indicate about how many and which students are actually graduating from high school were crucial factors in discussions as NCLB was considered for reauthorization.

In the meantime, NCLB allows states to set their own methods for calculating graduation rates. As a result, many states throughout the nation have been found to overestimate the number of their high school graduates to avoid reporting low graduation rates (Balfanz & Legters, 2004; Education Week, 2008; Orfield et al., 2004; Swanson, 2004). Ironically, while Florida is one of the few states to possess the longitudinal data system required to assess graduates as mandated by NCLB, one of its school districts was the first to be formally accused of overestimating its graduates. *Schroeder* (2008) alleged the dubious definitions and calculations of a public high school graduate employed by the state of Florida encumbered efforts to adequately address the achievement gap.

According to the plaintiffs, the SDPBC includes in its calculations: (a) students who did not receive a standard academic diploma; (b) students who have repeated a grade, and (c) students who dropped out of school and registered in a GED program. Arthur Johnson, one of the defendants named in the suit and the Superintendent of Schools for the School District of Palm Beach County in Florida, agreed with the ACLU regarding the need for conformity in the methods used to calculate high school graduation rates:

I do agree with the ACLU that the tremendous variations in the calculation of graduation are ridiculous. For example, the State of Florida shows

PBSD's Spanish River High with less than 1% drop -out rate. By comparison the John Hopkins' report, Dropout Factories, shows Spanish River with a 40% drop-out rate. (personal communication, April 14, 2008)

Dr. Johnson's pointed observations clearly demonstrate the need to establish a uniform and transparent method to assess the graduation rates in the SDPBC and Florida. This study, in part, emulates this call.

Florida's Public High School Graduation Rates

In alignment with NCLB, states were required to submit a plan of action to the United States Department of Education (USDOE), which denoted their efforts to implement the policy. Plans were to be submitted in a 3-step process as part of a Consolidated State Application. According to a memorandum released by FLDOE (personal communication, February 18, 2003) for informational purposes and dated February 18, 2003, Florida's Department of Education submitted the first portion of its Consolidated State Application on June 12, 2002, its second portion on January 31, 2003, and its third and final portion was due in May 2003. Upon the approval of its first proposal, the state received \$800 million dollars in federal funding.

Florida's second proposal to the USDOE consisted of a Consolidated State Application Accountability Workbook. In this instructional booklet, FLDOE included its plan for a comprehensive system of accountability and clarified its definition of AYP. Additionally, the state presented a plan that established a long-term goal of a 100% pass rate in reading and mathematics by AY 2014 along with its plan for ensuring accountability for all subgroups including economically disadvantaged, White, Black,

Hispanic, Asian, American Indian, and limited English proficient students, and students with disabilities The final portion of the application process provided the revisions required by the USDOE as well as evidence of FLDOE's policies, processes, and procedures.

Based on the preliminary submissions of their Consolidated State Application Accountability Workbooks, 34 states were notified that their plans did not comply with NCLB in regards to their respective calculations of a public high school graduate (Swanson, 2003). Despite the fact that three non-partisan educational experts ultimately approved all plans, only four states were found to have established statistically sound graduation rates based on the expressed definition, calculation method, and accountability efforts enumerated by NCLB. Colorado, Illinois, North Dakota, and Oregon were found to have coupled the provisions of AYP with racially disaggregated data to account for their graduates (Losen, 2004). However, with the exception of Colorado, the other three named states were found to use an accountability method notorious due to its use of phantom graduates (Losen, 2004).

In 2003, Christopher Swanson, of The Urban Institute and Education Policy Center, reviewed the plans approved for the 50 states and the District of Columbia. In his findings, Swanson noted that more than half of the states surveyed used the dubious calculation method alluded to in the previous paragraph. Additionally, while NCLB recommended the use of longitudinal data to calculate graduation rates, Florida, along with Arizona, Colorado, Hawaii, Michigan, New York, South Carolina, Tennessee, and Texas were the only states whose initial accountability plans utilized such data. What

follows is an excerpt from Florida's Consolidated State Application Accountability Workbook for 2003. In this selection, Florida's definition and subsequent calculations for its public high school graduation rates are clarified.

In its response to Principle 7 (Section 7.1) of the Workbook: What is the State definition for the public high school graduation rate? FLDOE reported:

In Florida, the number of graduates from a four-year adjusted cohort is divided by the total number of students in the adjusted cohort. The adjusted cohort (denominator) is determined through a multi-step process in which we subtract from the 9th grade cohort the students who transfer out of the school or are deceased and add the students transferring into the school who, at the time of their enrollment, are on the same schedule to graduate as students from the first group. This definition is more accurate than the definition created by the NCES.

For NCLB, we propose to use the prior year graduation rate for the calculation of AYP and the state report card. This is necessary because many districts graduate students during summer school and the deadline for AYP calculations and public reporting can occur prior to summer school conclusion for some districts. (2003, p. 42)

The NCLB graduation rate will vary slightly from the graduation rate that Florida publishes annually for other state-based reporting purposes because the state's NCLB rate excludes special diploma recipients from the numerator and adult-education GED recipients from the numerator and denominator. At this time, all Florida high school

students receiving a GED from the Florida Department of Education as well as special diploma recipients are included in our regular graduation rate calculation. (U. S. DOE, 2008a, p. 41)

While noting that its NCLB graduation rate would “vary slightly” from the rate the state reports annually for other state-based purposes, FLDOE found that its definition of a public high school graduate surpassed the definition used by the NCES. On May 19, 2003, the Department of Education approved Florida’s plan to use both a self-reported method to assess its graduation rates and another to comply with NCLB.

As of 2009, Florida publishes three differing calculations of its public high school graduation rates. Based on FSRM, Florida accounts for all of its diploma recipients. This calculation includes students who earn standard four-year diplomas, students who earn special diplomas, and students (and adults) who earn state-issued GED certificates. Second, to adhere to NCLB, Florida calculates students who receive standard four-year diplomas and GED certificates (FNCLB). Third, to align with a 2005 agreement reached with the NGA, FLDOE includes students who receive standard four-year and special diplomas in its calculations of its public high school graduation rates (FNGAC) (FLDOE, 2008a). Table 1 reflects Florida’s graduation rate calculation methods.

Table 1

Florida’s Graduation Rate Calculation Methods

Graduation Rate	Standard	Student	Adult	Special
Calculation Method	Diploma	GED	GED	Diploma
FSRM	X	X	X	X
FNCLB	X	X		
FNGAC	X			X

Note. Data retrieved from the USDOE (2009).

The variations found in Florida’s calculations of its public high school graduation rates create discrepancies, confusion, and controversy (see Dorn, 2006; *Schroeder*, 2008). Based on the continued over identification of children of color in special education programs throughout the nation (Artiles, Klingler, & Tate, 2006; Shealey, Lue, Brooks, & Mccray, 2005) FSRM and FNGAC graduation rate calculation methods are alarming. Furthermore, based on its economic impact (Amos 2008; Heckman & LaFontaine, 2008; McKinsey & Company, 2009), Florida’s inclusion of students and adults who earn state-issued GEDs in their FSRM and FNCLB calculations are egregious.

In order to contextualize Florida’s calculations of its public high school graduates, the final section of this literature review consists of a state study. This examination consists of the following sections: (a) Florida’s K – 12 Graduates; (b) The GED Test; (c) Florida’s GED Exit Option Model; (d) Florida’s GED Recipients; (e) Florida’s Special Diploma Recipients, and an (e) exposition that explains why this study, which focuses on Florida’s public high school’s graduates, matters.

Florida: A State Study

Florida's longitudinal data systems have been trumped as among the best in the nation. FLDOE possesses the ability to follow students from K–20 to the workforce. Education Week (2009) reported that school officials and policymakers at all levels of governance “are using the reams of data to improve schools and students and parents have been given access to students’ information to help them plan for a future that includes a college degree” (p. 14). Florida appears to have rightly invested in its capacity to track students along with the end results of their academic outcomes. However, the academic proficiency of its graduates, who receive standard diplomas, and the inclusion of GED and special diploma recipients as high school graduates in its graduation rates are cause for alarm.

Florida's K – 12 Graduates

Studies conducted by FLDOE found its K–12 graduates woefully unprepared to begin college course work. A 2002 report prepared by the Office of Student and Academic Success analyzed the performance of over 40,000 high school graduates on the College Placement Test (CPT), a readiness test given to potential college freshmen. The findings noted, “Of those with a standard high school diploma, 37.6% earned passing scores on all three sections of the placement test and were classified as ‘ready’ when they entered” (FLDOE, 2002,p. 3).

A 2006 report of Florida's graduates revealed significantly better findings for students who graduated with a standard high school diploma. FLDOE surveyed students who attended a Florida public college or university immediately following their high

school graduation. Based on their performance on the CPT, only 37 % of Florida's graduates required remediation (FLDOE, 2006), as opposed to 63.4% in 2002. While these results are far better than those reported in 2002, the 2006 study also revealed that African American students were the least prepared to begin college. "Among ethnic groups, Asian students had the highest percentage of test-takers scoring above the minimums in all three subjects [tested in the CPT], while black students had the lowest—74.5 percent and 40.2 percent, respectively" (p. 3). In brief, these two reports revealed that not all of Florida's students who receive standard high school diplomas are prepared to begin college.

The General Educational Development (GED) Test

The GED Testing Service proclaimed 2008 as its banner year, announcing its highest number of test-takers along with its highest pass rate since the 2002 revision of the test (American Council on Education (ACE), 2008). The GED Test was developed in 1942 by staff at the U.S. Armed Forces Institute. The battery of tests was originally intended for war veterans who were unable to complete their high school coursework. At its inception, the exam was designed so that most test-takers would pass and was offered at workplaces and post-secondary institutions that required high school diplomas (Tuttle, 2009).

In 1945 ACE created the Veterans' Testing Service (VTS). Its primary function was to provide U.S. colleges and universities with GED tests, which became available to civilians in 1947. By 1959 the number of civilian test-takers surpassed that of veterans. Then, in 1963 the VTS became the General Educational Development (GED) Testing

Service to mirror this shift in test-taking populations (ACE, 2008).

The GED Testing Service “develops, delivers and safeguards the GED Tests” (ACE, 2008). The GED assesses five core competencies and consists of primarily multiple-choice questions. It was revised in 1988 and 2002. The 2002 revision was initiated in response to colleges and employers who complained that GED recipients lacked real-world knowledge. In 2009, James Tuttle of StateUniversity.com described the revised exam in comparison to other standardized tests. He stated,

The General Educational Development questions fall into five test areas similar to those of public secondary standards-based assessments: writing skills, literature and arts, mathematics, social studies, and science. The writing test is divided into two sections: the first presents sentences that may or may not include errors that require correction. These questions are similar to those of the SAT Test of Standard Written English (as administered prior to 1994) and the Test of English as a Foreign Language (TOEFL). The second writing skills test is to construct an essay of about 200 words on one of several topics provided by the test makers. (ACE, 2008, n.p.)

Most testing centers offer the exam over two or three days, as it requires at least seven hours of testing. Possible scores on each section of the exam ranges from 200 to 800 and a minimum standard score of 410 is needed (for each section) to receive a GED certificate. Since 1942, more than 17 million Americans have received GED certificates (ACE, 2008).

Florida's GED examinations are offered at testing and resource centers throughout the state. Florida's GED Resources (2008) lists the exam is available to those residents of Florida who are over the age of 18, students who are 16 or 17 and have received an appropriate age waiver, and students not enrolled in high school. Florida's public colleges and universities are mandated by statute to accept a state-issued GED as they would a traditional high school diploma.

Florida's GED Exit Option Model

Florida awards more GED certificates than almost every state in the nation. In 2007 of the 47,426 students and adults sat for Florida's GED exam, 32,135 received GED certificates (ACE, 2008). Admittedly, the state depends on the GED exam as a viable option for students who may drop out of high school (FLDOE, 2004). Florida's students are able to take the GED exam at a public high school as part of a GED Exit Option Model.

A GED Exit Option is offered to students who are unable to (or who chose not to) graduate from Florida's public high schools. These students lack the required course work, grade point average, or did not pass the required state assessments (FLDOE, 2004). FLDOE put forward the following explanation of its GED Exit Option Model:

1. The GED Exit Option Model requires that the student continue to be enrolled in courses leading to a standard diploma and participate in a GED pre-test.
2. If the student takes and passes the GED tests before the end of the school year, he or she can graduate with a State of Florida Diploma and participate in all graduation activities. This includes students who may be credit-deficient or

who do not meet the minimum 2.0 GPA requirement.

3. If the student passes the GED Tests before the end of the school year and later passes the FCAT, he or she will graduate with a standard high school diploma and may participate in all graduation activities. This includes students who are credit-deficient or who do not meet the minimum 2.0 GPA requirement.

(FLDOE, 2004, p. 1-2)

These options are also available to students with disabilities who may be eligible to remain in Florida's public schools until they reach their 22nd birthday.

Florida's GED Recipients

Using data obtained from The Florida Education and Training Placement Information Program along with data obtained from Florida's Unemployment Insurance (UI) system, Tyler (2005) was able to match the GED records of all GED candidates who last tested in the years 1994 through 1998 with the UI earnings records of these same individuals from the first quarter of 1993 through the last quarter of 1999. His sample consisted of 86,543 males who were between the ages of 16 and 44 when they attempted the GED.

In the analysis, employment served as the main variable of interest. Overall, individuals who obtained the GED were more likely to be employed than individuals who failed the exam. Interestingly, the effect differed by race; GED certification did not positively influence the labor marker for males of color as it did for White males.

Florida's Special Diploma Recipients

Students who were awarded special diplomas are included FSRM and FNGAC graduation rate calculations. Special diplomas may be awarded to students with properly identified learning disabilities. These disabilities include, but are not limited to, specified learning disabilities, physical impairment, and language impairment. Students identified as emotionally and mentally trainable; profoundly handicapped; deaf, and hard-of hearing are also eligible to earn special diplomas (Beech et al., 2005).

Based on Florida's Statutes (see Section 1003.438), Florida's public school districts may award special diplomas to particular students with disabilities based on two options. The first option is afforded to students who have mastered the delineated Sunshine State Standards for exceptional students and have earned the minimum number of course credits determined by their local school board (Beech et al., 2005).

The second option for a special diploma, according to FLDOE's *High School Diploma Options for Students with Disabilities*, is awarded to those exceptional students who have acquired workforce and community skills delineated in the graduation training plan developed for the respective student by her/his individual educational plan (IEP) team. For these students, the following requirements must be met:

1. Be successfully employed full-time in the community for a minimum period of one semester, earning at least minimum wage
2. Achieve all annual goals and short-term objectives related to employment and community competencies identified on the transition IEP
3. Demonstrate mastery of employment and community competencies specified

in his or her graduation training plan. (Beech et al., 2005, p. 9)

While students with disabilities are welcome to apply to Florida's public colleges and universities, those students who earn special diplomas are not given the same consideration as those who earn state-issued GEDs and standard high school diplomas.

Students who receive special diplomas are not privy to the open door policies afforded at Florida's public universities and community colleges (Beech et al., 2005). Florida's high school graduates who receive special diplomas are encouraged, rather, to enroll in a career, technical, or GED certificate program offered at many of Florida's 28 community colleges. Reder (2007) found that, generally, of the 10% of special diploma recipients who participate in post secondary education, far fewer go on to earn college degrees.

Florida Matters

Florida's definition and subsequent calculations of a public high school graduate was an important issue to study for several reasons. First, SDPBC's graduation rates for African American and Hispanic students are critically low and current state practices were alleged to complicate systemic efforts to address this crisis (Schroeder, 2008). NCLB (2002) is the latest federal policy intended to improve the academic outcomes of *all* students. This policy defines a public high school graduate as a student who completes high school with a standard diploma in four years with her or his cohort. Florida, in contrast, includes students who receive GED certificates as well as special diploma recipients in their FSRM graduation rate calculation method. Moreover, the state reports three varying rates for its high school graduates.

Second, in 2002, NCLB established a long-term goal of a 100% pass rate in reading and mathematics by AY 2014, along with meaningful and continuous improvement as measured by AYP. A similar end goal and progressive rate of improvement for public high school graduation rates were not required. As a result, many states were able to establish lax criteria for graduation rate accountability and improvement. The Alliance for Excellence in Education (n.d.) noted that Florida, for example, set a long-term graduation rate goal of 85% and considered its high schools to have met AYP “if their overall graduation rate reached or exceeded 85% or improved by any amount from the previous year” (p. 3). The 2008 revisions to NCLB, however, requires the that:

1. A single graduation rate goal that represents the rate the state expects all high schools in the state to meet; and
2. Annual graduation rate targets that reflect continuous and substantial improvement from the prior year toward meeting or exceeding that goal.

(USDOE, 2008b, pp. 4-5)

While it is unclear how Florida will respond to this reform effort, it is clear that meaningful high school graduation data coupled with continuous improvement efforts are needed to improve Florida’s school systems, specifically as they relate to high schools in urban areas (Darling-Hammond, 2006; Kozol, 1991, 2005; Louis & Miles, 1990; Orfield & Eaton, 1996, Stovall, 2006; Swanson, 2003).

Lastly, while there is an influx of studies that focus on high school graduation rates (Dorn, 2006; Mishel & Roy, 2006; Roy & Mishel, 2008; Seastrom et al., 2005; Warren, 2005) and accountability efforts (Balfanz & Legters, 2004; Orfield et al., 2004; Pinkus, 2006; Swanson, 2003), there are few, if any, that pair a CRT methodology and empirical findings to investigate a state's definition and subsequent calculations of a public high school graduate. While discussions involving race and racism can be controversial, Black America's historical and present-day realities in the nation's public school systems are, in part, shaped by racism (DuBois, 1903; Ladson-Billings & Tate, 1995). CRT acknowledges this reality and argues that it should be challenged (Bell, 1980).

Chapter Summary

Chapter 2 provided a comprehensive explanation of CRT followed by narratives, jurisprudence, and federal policies, which affirmed the significance of public education to Black America. The conflicting calculation methods and varying definitions used to assess Florida's graduation rates present contrary reports to the public and stymie reform efforts. Exploring the effects of multiple methods for calculating high school graduates using a single set of data will bring clarity to the numbers and analyses of Florida's graduation rates. Comparative studies of graduation rates are needed to cast a light on how different methods affect the profiles of state-level graduation rates. The following chapter, Chapter 3, will explain the statistical methodology and Critical Race Realism, a CRT methodology, used to investigate Florida's definition and subsequent calculations of a public high school graduate.

CHAPTER 3: METHODOLOGY

The purpose of this study was two-fold. First, an investigation was conducted to determine whether a significant and consistent difference existed among Florida's public high school's graduation rates relative to student race and graduation rate calculation methods. Second, Critical Race Realism (a CRT methodology) was used to deconstruct Florida's definition and subsequent calculations of a public high school graduate. The results were to inform Florida policy makers of the effects of Florida's definition and subsequent calculations of a public high school graduate. The ultimate aim of this study was to improve and increase the opportunities for all students to graduate with standard high school diplomas.

This chapter begins with an explanation of the role of the researcher. This perspective outlines the rationale and impetus for this study. Next, the research questions and null hypotheses are reintroduced. The discussions in this chapter are then divided into two sections. The first section provides an overview of CRT and explains the use of Critical Racial Realism as a methodological framework in this study. The second section details the following the statistical procedures used in this study: Sample Size, Data Collection and Analysis, and Statistical Analyses.

Role of the Researcher

Critical hermeneutic scholars, Kincheloe and McLaren (2002), found that researchers exercise frames situated in history when investigating an occurrence. The

scholars also explained that one of the fundamental components of critical research was to identify and explain the role of the researcher. This facet underpins the ways she makes sense of a phenomenon. The civil class action lawsuit, that is, *Schroeder* (2009) was the first of its kind. As a researcher of color, I wanted to understand the controversy surrounding high school graduation rates, in spite of decades of school reform policies and measures, and why three different graduation rate calculation methods were utilized in the state of Florida. In respect to the latter point, I was curious to learn about the differences among graduation rate calculation methods and what impact, if any, those differences had on students of color.

Prompted by *Schroeder* (2008), my intent in this study was to use CRT to glean a focused account of the students who receive a standard high school diploma and of those who do not, using race and graduation rate calculation methods as indicators, in order to encourage equal educational opportunities and equity outcomes for all students in the state of Florida and throughout the nation. Educational policies, including policies for the calculation of public high school graduation rates, are often critiqued from a liberal perspective, ignoring the permanence of racism and its deleterious impact on students of color (Delgado & Stefancic, 2001; Parker, 2003). A race-conscious perspective is needed to illuminate race-based policies, namely those enacted as a consequence of NCLB (Freeman, 2005; Hollingworth, 2009), which hinders the academic achievement of all students.

Research Questions

The study analyzed data obtained from FLDOE and collected for Florida's public school districts. This study sought to answer the following questions:

1. Is there a difference among graduation rates relative to student race (White vs. Black vs. Hispanic)?
2. Is there a difference among graduation rates relative to graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC)?
3. Is there a consistent difference among graduation rates relative to student race (White vs. Black vs. Hispanic) and graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC)?

The following null hypotheses were tested to respond to the research questions:

H₀1. There is no consistent difference among graduation rates relative to student race (White vs. Black vs. Hispanic).

H₀2. There is no difference among graduation rates relative to graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC).

H₀3. There is no difference among graduation rates relative to student race (White vs. Black vs. Hispanic) and graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC).

An Overview of CRT

As explained in the Review of the Literature, CRT is an offset of the CLS movement (Crenshaw et al., 1995; Leiter, 2002) and is founded in the discourse of Derrick Bell (1980, 1987, 1992). CRT recognizes race as a social construct that is oftentimes used to rationalize social order (Omni & Winant, 1994). As an aspect of critical research, CRT proposes race-based perspectives to challenge traditional modes of inquiry and to promote a social justice agenda (Crenshaw et al., 1995). Table 2 illustrates the five basic tenets of CRT discussed in Chapter 2.

African American and Hispanic scholars adopted CRT in their collective efforts to remedy the challenges students of color experience in America’s public schools. Ladson-Billings and Tate (1995) formally introduced CRT to the field of education in order to provide a fundamental and primary understanding of how racial discrimination permeates and impairs the educational experiences of children of color. CRT presupposes educational policies and practices as inequitable and unjust in regards to students of color as political, social, and historical realities posit the normalization of inequitable, unjust, and racist practices levied against people of color by majority populaces (Crenshaw et al., 1995; Ladson-Billings & Tate, 1995).

Table 2

5 Basic Tenets of Critical Race Theory (CRT)

CRT Tenet	Definition	Source
Ordinariness	A stark contrast to the color-blind theory. This tenet recognizes that racism is deeply embedded in American life.	Bell (1980)
Interest Convergence	The interest of Blacks will only be accommodated when it converges with the interests of Whites.	Bell (1980)
Social Construction	Race is used by the majority culture as a social, economic, and educational barrier for people of color.	Omni & Winant (1994)
Differential Racialization	Focuses on the way in which different people of color are marginalized to fit the master narrative.	Delgado & Stefancic (2001)
Legal Storytelling	Counter-narratives that frame an experience or policy outcome that is contradictory to the master narrative.	Delgado & Stefancic (2001)

Along with America's students, educational research has too suffered at the long-reaching arms of racial discrimination and prejudice cemented by segregation (*Roberts v. Boston*, 1850; *Plessy v. Ferguson*, 1896) and preconceived mental models (Larson & Ovando, 2001). As a result, critical race scholars expanded CRT to include methodologies, which serve to inform and construct research agendas that aim to deconstruct hegemonic policies and practices (Ladson-Billings & Tate, 1995). Tate (1993) first used a CRT methodology in educational research to critique state-mandated standardized testing, which he believed to contain racial undertones. In his argument, he called for the use of culturally relevant pedagogy along with culturally sensitive curriculum for students of color in urban classrooms.

Solórzano and Yosso (2002) urged education-based scholars to juxtapose CRT in their research methods both in and out of the classroom. They proposed a CRT methodology for educational research that:

- (a) foregrounds race and racism in all aspects of the research process;
- (b) challenges the traditional research paradigms, texts, and theories used to explain the experiences of students of color;
- (c) offers a liberatory or transformative solution to racial, gender, and class subordination;
- (d) focuses on the racialized, gendered, and classed experiences of students of color; and
- (e) uses the interdisciplinary knowledge base of ethnic studies, women's studies, sociology, history, humanities, and the law to better understand the experiences of students of color. (Solórzano & Yosso, p. 24)

These scholars argued that CRT methodologies were needed to challenge education scholarship absent of the concept of racism and its marginalization of students of color during the educational processes (Solórzano & Yosso, 2002). Critical Race Realism, as named by Houh (2005), has emerged from this line of critique.

Critical Racial Realism as a Methodological Framework

Critical Race Realism aligns with CRT's social justice agenda (Crenshaw et al., 1995) as an effective mode of inquiry that can also be used to objectively substantiate meta-narratives. Critical Race Realism employs CRT tenets with empirical social science to analyze public policy and to generate pressure to change racist policies (Parks, 2006). Founded in American legal education, this methodological framework employs empirical data to: "(1) expose racism where it may be found, (2) identify racism's effects on individuals and institutions, and (3) put forth a concerted attack against racism, in part, via public policy arguments" (Parks, 2006, p. 4).

The use of Critical Race Realism as a methodological framework in this study is essential to unmask the codified inequities promulgated by NCLB, that is, Florida's definition and subsequent calculations of a public high school graduate. Specifically, three of CRT's tenets (social construction, ordinariness, and interest convergence) along with empirical social science data culled from FLDOE's databases were selected to deconstruct Florida's graduation rate calculation methods and to encourage policymakers to address the disparities in graduation rates among Florida's students. The next section explains the quantitative aspect of this investigation.

Statistical Methodology

This study utilized Repeated Measures research designs and Analyses of Variance (ANOVAs) to determine whether a significant and consistent difference existed among Florida's public high school's graduation rates relative to student race and graduation rate calculation methods for AY 2004-08. The study considered 12 variables generally defined as graduation rates for White, Black, and Hispanic students based on AAFGR, FSRM, FNCLB, and FNGAC graduation rate calculation methods.

Sample Size

As this study required Repeated Measures research designs, Florida's public school districts, of which there are 67, were the units of analysis. Having an alpha value set at .05, a sample size of 63 public school districts were needed to yield an a priori estimated power of .80 and a medium effect. Inasmuch as all 67 districts were included in the study, this power criterion was met. This study spanned AY 2004-08 as it encompassed the first 5 years of NLCB regulations and the first 4 years of the Graduation Counts Compact. Both of these policies were adopted, in part, to increase fidelity in the calculation of the nation's graduates.

Data Collection and Analysis

FLDOE has a comprehensive longitudinal database that is easily accessible from their website. Relevant data for this study were found in annual reports issued by the Education Information and Accountability Services Department and obtained via the Internet.

Data Collection Procedure

Data were collected for each of the tested variables using the following procedures:

AAFGR: In order to determine the AAFGR for AY 2004-08, adjusted student enrollment data reported in *Profiles of Florida School Districts* (AY 2000-06) for grades 8-10 were used to construct an adjusted averaged freshman cohort for each of Florida's 67 public school districts. These data were compared to the respective standard diploma recipients' data reported in the *Completer Report by District, by Diploma, by Race, by Gender*, resulting in an AAFGR. For example, to calculate the 2003 graduation rate for SDPBC using the AAFGR, the following equation applies:

$$\frac{AY\ 2003\ SHSD\ Awarded}{\left(\frac{Grade8Fall98 + Grade9Fall99 + Grade10Fall00}{3}\right)}$$

FSRM: Using a four-year adjusted cohort, students who earn standard and special diplomas, along with students and adults who earn GED certificates are included in FSRM graduation rates (FLDOE, 2002).

FNCLB: Created to align to NCLB, this graduation rate is based on a four-year adjusted cohort and counts students who earn standard diplomas and GED certificates (FLDOE, 2002).

FNGAC: To adhere to the 2005 guidelines established by the NGA Compact, this graduation rate is based on a four-year adjusted cohort and includes students who receive standard and special diplomas (FLDOE, 2009).

Table 3 illustrates the AAFGR, FSRM, FNCLB, and FNGAC graduation rate calculation methods.

Table 3

AAFGR, FSRM, FNCLB, and FNGAC Graduation Rate Calculation Methods

Graduation Calculation Method	Standard Diploma	Student GED	Adult GED	Special Diploma
AAFGR	X			
FSRM	X	X	X	X
FNCLB	X	X		
FNGAC	X			X

Data Analysis

After the data were collected for each of the tested variables, Predictive Analysis SoftWare (PASW) version 17.02 for Windows was used to enter and treat the data. The two main effects were student race (White, Black, and Hispanic) and graduation rate calculation method (AAFGR, FSRM, FNCLB, and FNGAC).

Statistical Analyses

Repeated Measures research designs were used to determine whether difference existed among Florida’s public high school’s graduation rates. First, a doubly multivariate repeated measures design was conducted to determine whether difference existed among Florida’s public high school’s graduation rates relative to student race and graduation rate calculation method. The units of analysis were school districts, with

which 196 data points were generated by the repeated measures design. Then, three ANOVAs were conducted to determine if a consistent difference existed among graduation rates relative to student race and graduation rate calculation method. The two variables, which constituted the repeated (or within Ss) variables, were student race (White, Black, and Hispanic) and graduation rate calculation method (AAFGR, FSRM, FNCLB, FNGAC).

In addition to empirical findings, the statistical analyses afforded a critical perspective, which detailed the impact of race-based graduation rate calculation methods on Florida's public high school students. The alpha level was set at .05 for all analyses.

Chapter Summary

Chapter 3 outlined and discussed the methodologies used in this study. The research design consisted of two components. First, a non-experimental, quantitative methodology was used to determine whether a statistically significant and consistent difference existed among Florida's public high school's graduation rates relative to student race and graduation rate calculation method. Second, based on these empirical findings Critical Race Realism (a CRT methodology) was used to deconstruct Florida's definition and subsequent calculations of a public high school graduate. The statistical analyses are presented and explained in Chapter 4 and a Critical Race Realist perspective of these findings is included in Chapter 5.

CHAPTER 4: ANALYSIS OF THE DATA

This quantitative study determined whether a consistent and significant difference existed among Florida's public high school's graduation rates relative to student race and graduation rate calculation methods for AY 2004-08. This study also determined the specific nature of the differences between graduation rates relative to student race and graduation rate calculation method. Twelve dependent variables (3 indicating race and 4 indicating calculation method) were generally defined as graduation rates for White, Black, and Hispanic students based on AAFGR, FSRM, FNCLB, and FNGAC graduation rate calculation methods. Table 4 outlines the 12 dependent variables and their abbreviations used in this chapter.

This chapter begins with a reintroduction of the research questions and null hypotheses. Then, the mean and standard deviation for each of the tested variables are presented and discussed along with the results of a doubly multivariate repeated measures design and three ANOVAs utilized to test this study's null hypotheses.

Table 4

Variable Abbreviations and Definitions

Abbreviation	Definition
AAW	Adjusted Average Freshman Graduation Rates for White students
FSW	Florida's Self-Reported Method graduation rates for White students
FNW	Florida's No Child Left Behind graduation rates for White students
NGW	Florida's National Governor's Association graduation rates for White students
AAB	Adjusted Average Freshman Graduation Rates for Black students
FSB	Florida's Self-Reported Method graduation rates for Black students
FNB	Florida's No Child Left Behind graduation rates for Black students
NGB	Florida's National Governor's Association graduation rates for Black students
AAH	Adjusted Average Freshman Graduation Rates for Hispanic students
FSH	Florida's Self-Reported Method graduation rates for Hispanic students
FNH	Florida's No Child Left Behind graduation rates for Hispanic students
NGH	Florida's National Governor's Association graduation rates for Hispanic students

Research Questions and Null Hypotheses

The overarching research question for this study asked, “How does Florida’s definition and subsequent calculations of a public high school graduate impact its students, particularly those of color?” The research questions and corresponding null hypotheses were as follows.

1. Is there a difference among graduation rates relative to student race (White vs. Black vs. Hispanic)?

H₀1. There is no difference among graduation rates relative to student race (White vs. Black vs. Hispanic).

2. Is there a difference among graduation rates relative to graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC)?

H₀2. There is no difference among graduation rates relative to graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC).

3. Is there a consistent difference among graduation rates relative to student race (White vs. Black vs. Hispanic) and graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC)?

H₀3. There is no consistent difference among graduation rates relative to student race (White vs. Black vs. Hispanic) and graduation rate calculation methods (AAFGR vs. FSRM vs. FNCLB vs. FNGAC).

Descriptive Statistics

The sample size for this study consisted of 67 school districts, which generated 196 data points through the repeated measures calculation. An examination of the mean and standard deviation of all the tested variables was performed. Table 5 illustrates the

AAFGR, FSRM, FNCLB, and FNGAC graduation rate calculation methods. Table 6 and Figure 2 outline the results of aforementioned descriptive statistics.

Table 5

AAFGR, FSRM, FNCLB, and FNGAC Graduation Rate Calculation Methods

Graduation Calculation Method	Standard Diploma	Student GED	Adult GED	Special Diploma
AAFGR	X			
FSRM	X	X	X	X
FNCLB	X	X		
FNGAC	X			X

Table 6

Graduation Rates by Calculation Method and Student Race

Student Race	Graduation Rate Calculation Method	Mean	Std. Deviation
White	AAFGR	66.74	10.40
	FSRM	79.79	9.21
	FNCLB	76.91	10.06
	FNGAC	76.20	10.28
Black	AAFGR	50.11	11.15
	FSRM	63.25	9.21
	FNCLB	57.26	9.12
	FNGAC	60.20	9.74
Hispanic	AAFGR	67.03	18.33
	FSRM	66.96	11.32
	FNCLB	62.83	11.40
	FNGAC	63.48	11.52

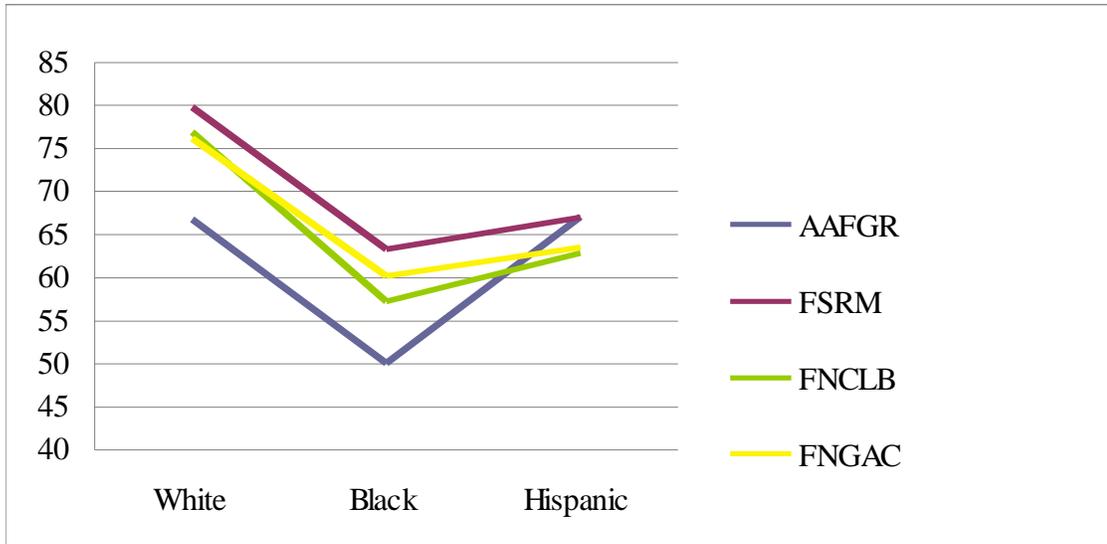


Figure 2. Graduation rate means by calculation method and student race.

White Students

For White students AAFGR had a lower mean compared to all other graduation rate calculation methods and FSRM rendered the highest mean. In other words, the average graduation rate was lower for White students when using the AAFGR and higher using the FSRM. The standard deviation varied slightly among all rates.

Black Students

For Black students AAFGR had a lower mean compared to all other graduation rate calculation methods and FSRM rendered the highest mean. Hence, similar to White students, the average graduation rate was lower for Black students when using the AAFGR and higher when using the FSRM. The standard deviation among all graduation rates varied more for Black than for White students.

Hispanic Students

In contrast to both White and Black students, the AAFGR and FSRM average graduation rates were almost identical for Hispanic students. In addition, both averages were quite high in comparison to those rendered by FNCLB and FNGAC graduation rate calculation methods. There was also a large difference in standard deviation for the AAFGR with respect to FSRM, FNCLB, and FNGAC.

Hypotheses Testing

Through the use of PASW version 17.02 for Windows, two statistical methods were employed to analyze the collected data. The analysis included a doubly multivariate repeated measures design and three ANOVAs. The sample size for this study consisted of 67 school districts, which generated 196 data points. The outputs were used to respond to the three research questions and to test their respective null hypotheses. These analyses generated a critical perspective of the impact of Florida's race based graduation rate calculation methods on White, Black, and Hispanic students.

Research Question 1: Difference among graduation rates by student race.

A doubly multivariate repeated measures design was conducted using student race and graduation rate calculation methods as the main effects. The alpha level was set at .05 to determine whether graduation rates differed by student race (White, Hispanic, and Black). The results are as follows.

Student Race

The with-in subjects main effect of student race was significant, Pillai's Trace = 0.79, $F(2, 194) = 370.42$, $p < 0.001$ (partial $\eta^2 = 0.79$, power = 1.00), suggesting

differences do exist with-in graduation rates relative to student race. Therefore, H₀1 was rejected.

Research Question 2: Difference among graduation rates by graduation rate calculation methods.

A doubly multivariate repeated measures design was conducted using student race and graduation rate calculation methods as the main effects. The alpha level was set at .05 to determine whether graduation rates differed by graduation rate calculation methods (AAFGR, FSRM, FNCLB, and FNGAC). The results are as follows.

Graduation Rate Calculation Methods

The with-in subjects main effect of graduation rate calculation methods were significant, Pillai's Trace = 0.86, $F(3, 193) = 394.86$, $p < 0.001$ (partial $\eta^2 = 0.86$, power = 1.00), suggesting differences do exist with-in graduation rates relative to graduation rate calculation methods. Therefore, H₀2 was rejected.

Research Question 3: Consistent difference among graduation rates relative to student race and graduation rate calculation methods.

A doubly multivariate repeated measures design was conducted using student race and graduation rate calculation methods as the main effects. The alpha level was set at .05 to determine whether graduation rates differed relative to student race and graduation rate calculation methods (AAFGR, FSRM, FNCLB, and FNGAC). The results are as follows.

Student Race and Graduation Rate Calculation Methods

The interaction effect between student race and graduation rate calculation methods was significant, Pillai's Trace = 0.38, $F(9, 2847) = 45.37, p < 0.001$ (partial $n^2 = 0.125$, power = 1.00), suggesting differences do exist with-in graduation rates relative to student race and graduation rate calculation methods. Therefore, H_03 was rejected.

Three ANOVAs were conducted to determine whether consistent difference existed among graduation rates relative to student race (White vs. Black vs. Hispanic) and graduation rate calculation methods (AAFGR, FSRM, FNCLB, and FNGAC). The alpha level was set at .05. Table 7 reflects these analyses.

White students. The results of the ANOVA were significant, $F(3, 949) = 71.94, p < .001$, suggesting that consistent differences exist among graduation rates for White students relative to graduation rate calculation methods. A Scheffe' post hoc test revealed the AAFGR had a lower mean compared to all other calculation methods and FSRM had a higher mean compared to all other calculation methods.

Table 7

ANOVA's for Graduation Rates for White, Black, and Hispanic Students Relative to Graduation Rate Calculation Methods

Graduation Rates	<i>F</i>	<i>P</i>	Partial n^2	Power
White	71.94 (101.04)	.001	0.19	0.99
Black	75.97 (100.86)	.001	0.19	0.99
Hispanic	3.61 (212.17)	.013	0.01	0.80

Note. Values in parenthesis presents mean squared error.

Black students. The results of the ANOVA were significant, $F(3, 949) = 75.97$, $p < .001$, suggesting that consistent differences exist among graduation rates for Black students relative to graduation rate calculation methods. A Scheffe' post hoc test revealed the AAFGR had a lower mean compared to all other methods and FSRM had a higher mean compared to FNCLB.

Hispanic students. The results of the ANOVA were significant, $F(3, 949) = 3.61$, $p < .05$, suggesting that consistent differences exist among graduation rates for Hispanic students relative to graduation rate calculation methods. A Scheffe' post hoc test revealed the AAFGR had a larger mean compared to FSRM, FNGAC, and FNCLB.

In sum, the ANOVAs affirmed that consistent differences exist among graduation rates relative to student race and graduation rate calculation methods. The salient findings in these analyses were the differing patterns of graduation rates in respect to the graduation rate calculation methods. To be specific, while the pattern of graduation rates were essentially the same for White and Black students (with the exception of a difference between FNCLB and FNGAC rates for Black students but not for White students), a significant interaction occurred among White, Black, and Hispanic students due to the drastically different profile for Hispanic students wherein the AAFGR and FSRM rates were essentially equivalent, 67.03 and 66.96.

Chapter Summary

This study revealed Florida's public high school graduation rates for AY 2004-08 to yield statistically significant and consistent differences relative to student race (White vs. Black vs. Hispanic) and graduation calculation method (AAFGR vs. FSRM vs.

FNCLB vs. FNGAC). Descriptive statistics illustrated that for White and Black students, FSRM rendered the highest mean and AAFGR the lowest. In contrast, for Hispanic students AAFGR and FSRM were almost identical and had a larger mean compared to FNGAC and FNCLB. Black students' AAFGR had a lower mean compared to all other graduation rate calculation methods. The standard deviation among graduation rates varied for Hispanic, Black, and White students.

The results of a doubly multivariate repeated measures design using student race and graduation rate calculation methods as the main effects revealed that significant differences exist with-in graduation rates relative to student race ($p < 0.001$) and graduation rate calculation methods ($p < 0.001$), and relative to student race and graduation rate calculation methods ($p < 0.001$). Last, the results of three ANOVAs confirmed that consistent differences exist among graduation rates relative to student race and graduation rate calculation methods. The profile for Hispanic students was noted, in particular, as the AAFGR and FSRM were essentially equal, causing a significant interaction.

Florida's public school districts, of which there are 67, were identified for data collection and inclusion in the study. Three research questions and corresponding null hypotheses were tested through the use of Repeated Measures research designs and ANOVAs. The null hypotheses were rejected. Chapter 5 will consist of a discussion of the findings along with implications for future research and recommendations for policymakers using a Critical Race Realism methodology.

CHAPTER 5: SUMMARY AND DISCUSSION

NCLB is the latest and most aggressive federal effort aimed to improve the academic outcomes of *all* students. Built on the foundation of *Brown* (1954), this federal policy promises to leave no child behind and to improve the educational outcomes of all students, giving extra assistance to those historically marginalized and underserved by America's public school systems. Since its inception in 2002, however, the Act's efficacy has been contested (Freeman, 2005; Hollingworth, 2009). While many civil rights and social justice activists initially hailed the reauthorization of ESEA (Darling-Hammond, 2006) many others were concerned that the policy would result in inequitable outcomes and "unintended" consequences (Tillman, 2004).

This study focused on one aspect of Florida education law and policy that allegedly produced inequitable outcomes for students of color – Florida's definition and subsequent calculations of a public high school graduate (*Schroeder*, 2008). As a provision of NCLB, high school graduation rates are a component of AYP at the secondary level. While federal statutory language defines graduation rates as "the percentage of students who graduate from secondary school with a regular diploma in the standard number of years" (NLCB, 2002, Section 1111(b)(2)(C)(vi)), the USDOE allowed for an alternative definition "developed by the State and approved by the Secretary in the State plan" (NLCB, 2002, §200.19(a)(1)(i)(B)). As a result of these contrasting mandates, inconsistent definitions and calculations of a public high school

graduate were found to obscure the current graduation crisis and undermine NCLB's objective to close the achievement gap.

This chapter is structured around an exposition of Florida's definition and subsequent calculations of a public high school graduate. In the following sections, the purpose, methodology, and findings of this study are revisited. Then, a discussion that frames and interprets the empirical findings of this investigation through the lens of Critical Race Realism is offered. Last, this chapter will conclude with implications for and recommendations for policymakers.

Restatement of the Purpose

This study determined whether a statistically significant and consistent difference existed among Florida's public high school's graduation rates relative to the variables of student race (White, Black, and Hispanic) with respect to graduation rate calculation methods (AAFGR, FSRM, FNCLB, and FNGAC). Second, this study used Critical Race Realism as a methodology to illustrate the implicit bias in Florida's graduation rate calculation methods. The ultimate aim of this study was to improve and to increase the opportunities for *all* students to graduate with standard high school diplomas.

Review of the Methodology

This study used Critical Race Realism, a CRT methodology, to frame and interpret Florida's calculations of a public high school graduate for AY 2004-08. To accomplish this, an AAFGR (Greene & Forster, 2003; Greene & Winters, 2005, 2006; Seastrom et al., 2005) was calculated from FLDOE data for White, Black, and Hispanic students by dividing the number of standard diploma recipients in a given year by the number of (adjusted) students enrolled in grade 8 five years earlier, grade 9 four years

earlier, and grade 10 three years earlier. Next, Florida's White, Black, and Hispanic graduates based on FSRM, FNCLB, and FNGAC graduation rate calculation methods were obtained from FLDOE's databases via the Internet. This data, along with the previously mentioned AAFGR calculations, were stored in PASW version 17.02 (for Windows) for statistical analyses.

Next, a quantitative method that included a doubly multivariate repeated measures design was conducted to determine whether difference existed among Florida's public high school's graduation rates relative to student race and graduation rate calculation method. Then, three ANOVAs were performed to determine if a consistent difference existed among graduation rates relative to student race and graduation rate calculation methods. The two variables, which constituted the repeated (or within Ss) variables, were student race (White, Black, Hispanic) and graduation rate calculation method (AAFGR, FSRM, FNCLB, FNGAC). The alpha level was set at .05 for all analyses.

The sample size for this study consisted of 67 school districts, which generated 196 data points through the repeated measures calculation. This study spanned AY 2004-08 as it encompassed the first 5 years of NLCB regulations and the first 4 years of the Graduation Counts Compact. Both of these policies were adopted, in part, to increase fidelity in the calculation of the nation's graduates. These statistical analyses afforded a critical perspective along with empirical findings that served to elucidate whether Florida's definition and subsequent calculations of a public high school graduate are indeed aligned with NCLB's expressed guidelines and intent. Ultimately, the study detailed the impact of race-based graduation rate calculation methods on Florida's students.

Critical Race Realism is comprised of CRT, empirical social science, and public policy (Parks, 2006). The use of Critical Race Realism as a methodological framework in this study is essential to unmask the codified inequities promulgated by Florida's definition and subsequent calculations of a public high school graduate. Empirical social science data culled from FLDOE's databases were selected to deconstruct Florida's graduation rate calculation methods and encourage policymakers to address the disparities in graduation rates among Florida's students.

Summary of the Statistical Findings

This study found that there were statistically significant and consistent differences among Florida's public high school graduation rates for AY 2004-08 relative to student race and graduation rate calculation methods, with an exception for Hispanic students. Post hoc analyses confirmed that for White and Black students the average graduation rate was lower when using AAFGR and higher based on the FSRM graduation rate calculation method. Based on these findings it became apparent that when GEDs and special diploma recipients were removed from the methodology as they are in the AAFGR, average graduation rates for White and Black students decreased. Moreover, Florida's graduation rates for Black students are substantially lower when solely students who earned a standard diploma are counted.

In contrast, the average graduation rate for Hispanic students was essentially the same based on AAFGR and FSRM graduation rate calculation methods. As such, the average graduation rate for Hispanic students is virtually unaffected when students who earned GEDs and special diplomas are not counted as graduates. This indicates that,

proportionately, a greater number of Hispanic students earned standard diplomas during AY 2004-08 in comparison to White and Black students. The salient finding in this investigation was the significant interaction between student race and graduation rate calculation methods for Hispanic students in particular. The next section proffers a discussion of the empirical findings of this study using the lens Critical Race Realism.

Discussion of the Findings: A Critical Race Realist Perspective

The narratives of Douglass (1845), DuBois (1903, 1935), and Woodson (1933) detailed Black America's resolute belief in public education as a means to the American dream. Their testaments voiced the realities people of color are forced to contend with in a nation allegedly founded on the principles of freedom and justice and tempered by ethics. Douglass (1845) wrote of the importance of education. Purposely, DuBois (1903) explicated the dual lives African Americans must marry, being both the darker brother and an American, and Woodson (1990) chronicled the deliberate *miseducation* of the Negro by White America.

As a result of these findings, scholars of color created CRT in an effort to reconcile these dichotomous and racialized realities (Bell, 1980, Crenshaw et al., 1995). The constitutional contradiction (Bell, 1987) and the U.S. Supreme Court's early ruling (*Plessy*, 1896) underpin the historical and legal precedence for the subjugation of America's Black citizenry. To date, this bias is evident in every facet of society, including public education.

CRT, as a tool, troubles terms like "'equity' and 'adequacy'" (Alemán, 2007, p. 527) for educational leaders who struggle for social justice in America's public schools. To this end, Critical Race Realism, a methodological framework founded in CRT, was

employed to illustrate the effects of FLDOE's race-based graduation rate calculation policies on Florida's public high school students. In the following sections, the empirical findings presented in Chapter 4 are juxtaposed to three of CRT's tenets (social construction, ordinariness, and interest convergence) to demonstrate how FLDOE's approaches to calculating graduation rates are contradictory to the intent NCLB (2002), which promised to narrow the achievement gap and to improve the academic outcomes of *all* students.

Social Construction

As a fundamental tenet of CRT, social construction suggests that race is a man-made ideal that serves a societal purpose (Crenshaw et al., 1995; Delgado & Stefancic, 2001; Omni & Winant, 1994). In America, hegemonic practices were found to affirm White racial dominance and the belief that "racist hierarchal structures govern all political, economic, and social domains. Such structures allocate the privileging of Whites and subsequent Othering of people of color in all arenas" (DeCuir & Dixson, 2004, p. 27). In relation to Critical Race Realism, the principle of social construction is inherent in policies, including those for education, and can be deconstructed to expose hegemonic ideals along with outputs that fuel the idea of a White racial hierarchy.

Critical Race Realism's use of empirical analyses makes it particularly useful for understanding the implicit bias in Florida's account of its graduates. The precept of social construction is exemplified in FLDOE's graduation rates (FSRM, FNCLB, and FNGAC). To explain, as part of this study, an alternative graduation rate calculation method was adopted, the AAFGR. This method complies with NCLB's (2002) suggested graduation rate calculation as it is based on a cohort method and counts only standard diploma

recipients as high school graduates.

In order to determine the AAFGR, and as previously stated, adjusted student enrollment data reported in *Profiles of Florida School Districts* (AY 2000-06) for grades 8-10 were used to construct an adjusted averaged freshman cohort for each of Florida's 67 public school districts for AY 2004-08. These data were compared to the respective standard diploma recipients' data reported in the *Completer Report by District, by Diploma, by Race, by Gender*, resulting in an AAFGR. This calculation focuses on students who graduate with a standard diploma and excludes other forms of exit from high school, such as the GED and special diplomas, which appear in one or more of Florida's calculation methods.

There are two results evinced by the statistical comparisons across calculation methods that can be explained under the tenet of social construction. First, under Florida law and policy, White students appear to graduate in higher numbers than Hispanic or Black students. However, based on the AAFGR, Hispanic students, on average, received a greater proportion of standard high school diplomas in comparison to both Black and White students for AY 2004-08. This reality is contrary to the ideals presented by Florida's FSRM, FNCLB, and FNGAC calculations as they lead the casual observer to believe that Whites are completing high school at a higher rate than Blacks and Hispanics.

The manner in which Florida defines a high school graduate and the method by which Florida calculates graduation rates obscure the reality that considerably fewer students, regardless of their race or ethnicity, leave high school with a standard diploma. The reported graduation rates, as calculated using the FSRM, FNCLB, and FNGAC

formulas, are skewed by the inclusion of students who earned special diplomas and GEDs.

Second, FLDOE's graduation rates demonstrate a statistically significant difference in academic achievement among White, Hispanic, and Black students – socially constructing a racial hierarchy. White students appearing to attain the best rates of graduation constructs the superiority and privilege of Whites. Black students' attaining the worst rates constructs Blacks as the least able and least privileged group. While the graduation rates for Hispanic students are slightly higher than Blacks, but lower than Whites, leaves the social impression or construction that there is a differentiation in their academic achievement and social standing relative to White students, which may be attributed unwittingly and solely to race. As such, consideration for possible racist causes of the achievement gap, such as the social construct of “blaming the victim,” is deflected and children of color remain marginalized in Florida's classrooms.

Clarity and precision are needed to evaluate how the variables that affect graduation rates, such as inadequate funding, inadequately prepared teachers, and poverty, impact Florida's students. At this time, Florida's stakeholders are unable to appraise the quality of education found in public schools throughout the State as FLDOE's graduation rate calculation methods do not subscribe to the definition and calculation of a public high school graduate promulgated by NCLB (2002). Instead, the FSRM, FNCLB, and FNGAC propagate inaccurate and biased educational outcomes, which serve to conceal the true status of high school graduation in Florida and to hinder the academic achievement of *all* of Florida's students. In particular, they continue to inadequately address the achievement gap between White students and students of color.

Most importantly, it maintains the social construct of race, which delegates Whites to the top of the academic and social hierarchy and reinforces stereotypical myths that Hispanics and Blacks cannot compete with Whites in academic arenas.

Ordinariness

Ordinariness is a central tenet of CRT. Based on the principle of ordinariness, many CRT theorists believed that racism “is ordinary, not aberrational” (Delgado & Stefancic, 2001, p. 7), rendering it complicated to address. This is because, in part, nearly 50 years ago, signs over many public and private institutions in this country read *Whites Only*. This made racism easily identifiable. Nowadays, however, overt racism is masked by racial disparities that are explained away as unintended consequences, particularly in government entities like public schools.

Racism, however, is alive and well. Racism’s effects, in fact, can be found in the nation’s segregated, post-segregated, and currently re-segregated public school systems (*Roberts v. Boston*, 1850; *Brown v. Board of Education*, 1954; Orfield & Lee, 2006; *Parents Involved in Community Schools*, 2007). Kozol’s (2005) 5-year study of 60 public schools in 11 states found that despite the promise of *Brown* (1954) many public schools in America’s urban areas serve primarily communities of color, and in addition to being separate and unequal, lack the necessary physical facilities, teaching staff, and funding to meet the academic needs of its students.

An analysis of mean graduation rates derived from FNGAC and FNCLB calculations (see Table 8) revealed that Black students receive significantly more special diplomas in comparison to Hispanic and White students. This finding and literature, that affirmed the over representation of Black students in special education programs (Articles

et al., 2006; Shealey, et al., 2005), reinforce the conclusion that Florida’s public school system has failed to effectively educate its students, particularly Black students. As such, Florida’s definition and calculation of a high school graduate are racist. They hide the inequities of an educational system that does not address the academic needs of Florida’s Black students.

Table 8

Calculation Methods by Means and Race

Calculation Method	Means by Race		
	Whites	Blacks	Hispanics
FNCLB	76.91	57.26	62.83
FNGAC	76.20	60.20	63.48

The tenet of ordinariness is further demonstrated in Florida’s mission for its K-20 public education system, which proposes to “Increase the proficiency of all students within one seamless, efficient system, by allowing them the opportunity to expand their knowledge and skills through learning opportunities and research valued by students, parents, and communities” (2008, Fla.St.§1008.31). To facilitate this objective, FLDOE prides itself on establishing goals and objectives for traditional and non-traditional students. These goals and objectives are outlined in FLDOE’s *Next Generation PreK-20 Education Strategic Plan* and are intended to increase and improve student participation in post-secondary institutions, which includes students who graduate from career, technical, and GED certificate programs.

Quite the reverse, students who receive special diplomas do not benefit from the open door policies afforded to standard diploma and GED recipients at Florida's public universities and community colleges (Beech et al., 2005). An investigation of FLDOE's databases revealed a policy brief that indicated that far less than the estimated 10% of Florida's high school graduates who receive special diplomas and participate in post secondary education complete their course of study (Reder, 2007).

Furthermore, FLDOE's response to NCLB's (2002) suggested definition and calculation of a public high school graduate demonstrates the CRT tenet of ordinariness by its inclusion of students who exit high school without receiving a standard high school diploma in its graduation rate calculation methods. To illustrate, while NCLB defined a public high school graduate as one who received a standard diploma within four years, FLDOE aggregated, as graduates, students who received standard diplomas along with GED recipients.

The GED stands in stark contrast to a standard high school diploma, as well. As demonstrated in the literature, students who receive GEDs do not reap the expected benefits of a high school graduate in terms of participation in post-secondary institutions and lifetime earnings. Heckman and LaFontaine (2008) reported, "the most significant source of bias in estimating graduation rates comes from including GED recipients as high school graduates" (p. 2). Specifically, a GED certificate was found to be of little significance to its recipients with most earning the equivalent to that of a high school dropout (Orfield et al., 2004); who, it is estimated, based on AY 2007-08 alone, cost Florida \$25,349,857,813 in potential earnings (Amos, 2008). Also, a study conducted by Tyler (2005) found that a GED did not improve the labor market for males of color as it

did for Whites.

Inherent in the promise of NCLB was the belief that people of color would receive equal and equitable educational experiences and opportunities in America's classrooms. The inclusion of GED recipients in Florida's graduation rate calculation methods (FNCLB) undermines the intent of the Act and serves to conceal Florida's broken promise as evidenced in its AAFGR rates, which are alarmingly low for Black students. Interestingly, while comparing AAFGR and FNCLB rates, I found far more White students received GEDs in comparison to both Black and Hispanic students. This disparity exemplifies how FLDOE's response to NCLB may have encouraged unintended consequences by masking the dismal educational outcomes of Florida's White students, as well as those for students of color.

What is most important to this discussion, however, is that the ordinariness of racism in Florida's schools is manifest by graduation rate policies that hide the disparate impact of these policies on students of color. Florida legislators and policymakers continue to disregard their educational needs and thereby limiting those students' post secondary education and career options.

Interest Convergence

Bell (1980) found that White America would only act on behalf of people of color if it were to its benefit. He labeled this theory as interest convergence. The results of this study indicate that this is in operation under the guise of high academic standards and could be utilized to argue for further improvement in the educational opportunities for students of color.

Until recently, the nation has paid little attention to its graduates, particularly those of color (NCLB, 2002; NGA Compact, 2005; U.S. Secretary of Education . . . Announces, 2008). The recent interest in the lack of uniformity and accountability in calculating the nation's graduates has taken center stage, as states and school districts are finding themselves in the hot seat for using dubious means to report student performance on standardized tests and reporting obscure graduation rate calculations (Heilig & Darling-Hammond, 2008; *Schroeder*, 2008).

One could argue that White America's current interest in the method and accountability attached to the nation's graduates is a far cry from selfless. Based on the tenet of interest convergence, the nation's sudden concern is promulgated by the fact that many of the current graduation rate policies and calculations serve to promote a citizenry that is inadequately prepared for post secondary education and for securing meaningful employment and a living wage. In other words, the federal call to action to improve public education is based more on self interest than on an altruistic concern for historically underperforming groups, such as students of color. It is important to the nation that all students are adequately prepared to lead industry and to improve the economy in our current highly competitive global environment.

What is apparent in Florida, based on FLDOE's graduation rates (FSRM, FNCLB and FNGAC), is that the public is led to believe that Florida's high school graduates have acquired the appropriate skill sets, which allow them to seek further academic and vocational educational opportunities. The fact of the matter is large numbers of graduates, particularly White and Black students, are leaving school with GEDs or special diplomas and, in so doing, are ill prepared for their future. This was indicated in literature (Reder,

2007; Tyler, 2005), which confirmed that a GED or special diploma places students at risk of failing to participate in post-secondary educational opportunities or meaningful employment.

Accordingly, by implementing uniform graduation rate calculations and monitoring student progress, Florida can elucidate the problem of low graduation rates and can make an astute investment in education in order to promote a successful economic future for its citizens and for itself. Increased graduation rates for all students coupled with post-secondary education and/or vocational training equals a healthy economy.

With the rapid growth of the percentage of students of color and with the state and national need for those students to be successfully educated, it is in the interest of policy makers first to support an accurate calculation of graduation rates and second to remedy the conditions that hinder the academic success of students of *all* students. If self-interest is indeed a motivator, then clearly the fact that White students in Florida are not earning standard diplomas at the rate that the current calculation methods allege, then it is certainly in the self-interest of White Floridian policymakers to advocate increased educational quality in all Florida public schools. Failure to do so will lead to a continued decline in the economic strength of the states and the nation.

In the past, educational policies and practices have been enacted, repealed, revised, or reauthorized when a travesty of justice or crisis is revealed (see *Elementary and Secondary Education Act*, 1965; *Gun Free Schools Act*, 1994; *Individuals with Disabilities Education Act*, 1975, 1990, 1997, 2004; *No Child Left Behind Act*, 2002, 2008; *Safe and Drug-Free Schools and Communities Act*, 1994). Florida's public school

system, based on its definition and subsequent calculation methods of a public high school graduate, is inundated by race-based inequities. And while the majority of U.S. Supreme Court justices may believe that the federal constitution is color blind (*Parents Involved in Community Schools v. Seattle School District No. 1*, 2007), there is no such guarantee in education policy. The results of this study suggest that Critical Race Theory should be a primary framework in analyzing an educational policy or practice to insure equitable and adequate outcomes and the promise of NCLB. Based on this assertion, this study proposes implications and recommendations for policymakers. To argue that policies are race neutral is to ignore the fact that such policies seldom have race neutral outcomes or impact and, in fact, tend to maintain the status quo of White superiority in schools.

Implications and Recommendations for Policymakers

NCLB legislation aims to equalize achievement in our nation's public school systems. However, the 2002 policy posited contradictory language in respect to the definition and calculation of a public high school graduate. In 2008, the USDOE issued revised regulations, which clearly defined a high school graduate as a student who graduates in four years with a standard high school diploma. Based on this study's findings, this was a step in the right direction to improve accountability and AYP at the secondary level. In response to the revised federal mandate, beginning in AY 2011-12, Florida will publish a new federal uniform graduation rate, which only assesses its standard diploma recipients, a method synonymous to the AAFGR. I view this amendment as a positive step in rectifying the first part of the public school education policy program. It will elucidate the true status of graduation rates in Florida, in general,

and of graduation rates among students of color, in particular.

The 2008 revisions to NCLB now allow states to include students who graduate in more than 4 years in their calculations of a public high school graduate. To date, FLDOE has not acted on this proposal. If FLDOE decides to participate in this option, students who do not graduate with their cohort should be counted as non-graduates for their respective cohort and added to their graduating cohort. This, again, is to shine a light on the condition of school completion rates and hopefully create political pressure on the state legislature to act in such a way as to improve the quality of education and to improve the rate at which all students complete high school with a standard diploma.

As stated in the literature review, in 2002 Florida set a long-term graduation rate goal of 85% and considered its high schools to have met AYP “if their overall graduation rate reached or exceeded 85% or improved by any amount from the previous year” (Alliance for Excellent Education, n.d., p. 3). The 2008 revisions to NCLB, however, require that:

1. A single graduation rate goal that represents the rate the state expects all high schools in the state to meet; and
2. Annual graduation rate targets that reflect continuous and substantial improvement from the prior year toward meeting or exceeding that goal.

(USDOE, 2008b, pgs. 4-5)

Based on this study’s findings, NCLB, in conjunction FLDOE, should establish race-conscious graduation rate goals that are based on the performance of subgroups across the state and in each school district. NCLB established similar albeit race-neutral goals in reading and mathematics for students in grades 3 - 10. An accountability method

such as this takes into account where the cohort is and based on its findings, establishes meaningful and long-term goals of 100% proficiency -- in this case, a 100% graduation rate -- as well as an accompanying improvement plan, which should be assessed by federal officials annually as a part of AYP.

Most importantly, Florida legislators must find the political will to improve the quality of education through action and not simply words. The Florida State Constitution expects no less. It asserts that it is the “paramount duty of the state” to provide for “a uniform, efficient, safe, secure, and high quality system of free public schools that allows students to obtain high quality education” (1998, Art. IX, § 1) If Florida graduation rates are any indicator, the state has failed in its duty, particularly to students of color.

Conclusion

Black America’s past and present reality in public education has illustrated the need for new paradigms to address the achievement gap promulgated by contextual factors that serve to impede the academic achievement of all students. The literature review, statistical analyses, and Critical Race Realist perspective included in this study found Florida’s definition and subsequent calculations of a public high school graduate to result in significant and consistent differences among graduation rates relative to student race and graduation rate calculation method. Purposely, this study revealed the following:

1. Based on the AAFGR, Hispanic students have a larger mean than both Black and White students, revealing that Hispanics are earning proportionately more standard diplomas than Whites and Blacks.
2. Black students have a larger graduation mean based on FSRM rates in comparison of AAFGR, FNCLB and FNGAC calculations, which tells us that

they earn a proportionately higher number of special diplomas in comparison to standard diplomas and GEDs.

3. Based on mean graduation rates garnered from FNGAC and FNCLB, White students received more GEDs in comparison to Hispanic and Black students.
4. Based on mean graduation rates derived from FNGAC and FNCLB, Black students received significantly more special diplomas in comparison to Hispanic and White students.

Permuth and Mawdsley (2006) argued, “Policies are manifestations of the choices society has made about its future” (p. 141). This study illustrated how Florida promulgated systemic inequities based on its definition and subsequent calculations of a public high school graduate along with an underclass that may serve to cripple its economy.

Currently, Florida’s graduation rate calculation methods serve to obscure the significant and consistent difference among graduation rates relative to student race and graduation rate calculation method. Such practices can be said to benefit those currently responsible for the educational system. When NCLB was introduced in 2002, while high schools were required to report their graduation rates, they did not have to be disaggregated by subgroups, except for under the Safe Harbor provision. Moreover, the mandate did not require a uniform definition or calculation method for America’s public high school graduates. This has resulted in debate (Dorn, 2006; *Schroeder*, 2008) and debacle (Heilig & Darling-Hammond, 2008), and, as evidenced by this study, inequitable student outcomes.

Recommendations for Further Study

The impact of slavery is far-reaching and long lasting (Bell, 1987). For these reasons, I believe, CRT is a valuable component in all research initiatives, particularly those related to public education. More than 50 years after the historic *Brown* decision, children of color are still marginalized in school systems across America (Patterson, 2001, Tillman, 2004). The recent Court's rulings regarding school district desegregation efforts in *Parents Involved in Community Schools* (2007) and *Meredith v. Jefferson County Board of Education* (2006) confirm this reality.

Many low performing schools are contained in school districts that are populated primarily by Black and Hispanic students. Kozol (1991, 2005) proffered glaring details of such schools and districts. While *Brown* and ensuing educational research initiatives focused on access and equity (Patterson, 2001), future studies devoted to understanding the intersection of race, class, and policy in America's schools are needed to address the hegemonic practices that stymie the academic achievement of all children.

This study was in response to *Schroeder* (2009), a class action lawsuit filed against SDPBC and its superintendent on behalf of Florida's children. Based on the findings of this study, I propose the following recommendations for further study:

1. A regional (rural, urban, and suburban) study of contributing factors to successful student achievement in districts, particularly those with large populations of students of color.

As this was a state study, which required a Repeated Measures research design, academic achievement as measured by the receipt of a standard high school diploma was not offered based on regional district contexts. However, based on this study's findings,

Hispanic students earned considerable more standard high school diplomas in Florida's southern public school districts. Thus, a further examination of student achievement in relation to race and specific district contexts may provide useful best practices for policymakers. The literature review conducted for this study indicated that students who receive standard high school diplomas are more apt to go on to post secondary institutions and lead rewarding lives.

2. A district-level study of the perceptions and attitudes of teachers employed in high performing secondary schools.

The findings of the study indicated that some districts, in varying contexts, were experiencing academic success with their students as measured by student receipt of standard high school diplomas. While this study affirmed the bias nature of Florida's graduation rate calculation methods, a study that focuses on best practices, and the teachers who culminate them in diverse district contexts, may serve to increase student achievement and teacher efficacy.

Reflections

Frenzy ensued on March 18, 2008, when lawyers from the national ACLU and its Florida chapter cited the Palm Beach County School Board and its district superintendent for their failure to uphold Florida's Constitution based on SDPBC's dismal high school graduation rates (*Schroeder, 2008*). As an educational leader I wanted to understand the controversy surrounding graduation rates. As a person of color I was curious to learn if and how Florida's nebulous calculations of its high school graduates impacted students of color.

Many of my initial concerns were validated in the review of literature and in the statistical analyses conducted for this study. I found significant differences among graduation rates relative to student race and calculation method. The use of Critical Race Realism afforded a means to explore the realities promulgated by Florida's public school systems and to expose practices, in this case graduation calculation methods that define a racial hierarchy.

There is a need to question social inequality, racism, and injustice. I believe such critical inquiry and reflection is needed if we are to successfully address the dissonance that occurs in classrooms in Florida and throughout the nation. Bell (1980, 1987) found that while racism is a permanent fixture in American life, we still must struggle against it. Thus, by facing the mental models (Larson & Ovando, 2001) that continue to befall children of color in the classroom, we can work collectively to affectively educate those whom we consistently leave behind.

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