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# AN ANALYSIS OF GATEWAY PROGRAMS ON AFRICAN AMERICAN STUDENT RETENTION: A CASE STUDY IN AN URBAN HIGHER EDUCATION SETTING

by

## JANICE COOK JOHNSON

#### DISSERTATION

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

## **DOCTOR OF PHILOSOPHY**

2017

MAJOR: EDUCATIONAL LEADERSHIP AND POLICY STUDIES

Approved By:

Advisor

Date



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#### DEDICATION

To Mom and Dad, we did it.

This study was dedicated in memory of my parents, Erma L. Tinsley Cook and Albert L. Cook, who believed in me more than I believed in myself.

To my daughter, Alysha L. Johnson, who was in the trenches with me through her daily phone calls giving me life and replenishing me when I was giving everything to this study.

To my son, Marcus A. Johnson, who walks in my footsteps kinder, gentler, and more powerful.

To Greg Johnson who matched my passion in his work and understood my complete submersion in this process.

To my cousins, Dr. LaShonda Reid and Dr. Terry Rowden, who earned their degree before me and showed me it was possible.

To the host of family and friends that encouraged and fed me and supported me along this journey, you illuminated my path. I love you all so much.



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#### **CHAPTER 1. INTRODUCTION**

In the American educational system, there has been a persistent disparity in academic achievement between African Americans and Whites in every region of the United States and at every level of education (Mincy, 2006). This disparity, as measured by enrollment trends and graduation rates, placed ethnic minorities at the bottom (Lawrence III, 2006). Researchers have identified economic, social, and governmental policies as the culprit of the factors that continued to thwart African American progress (Blackmon, 2008; deMarrais & LeCompte, 1999; Harper, Patton, & Wooden 2009; Kozol, 2005; Litwack, 1998; Marger, 2009; Mincy, 2006; Minor, 2008; Payne, 2005; Peterson, 2006). In particular, some believed that the role of the United States judicial system in protecting an ethnic social order was at the core of the second-class status many African Americans occupied (Blackmon, 2008).

Discriminatory economic, social, and governmental policies reinforced and perpetuated other areas of inequality in African American life beyond academic achievement. The Black Codes and Jim Crow Laws of the nineteenth and twentieth century embodied the tenets of social discrimination. The practice of geographic discrimination in bank lending and insurance availability in combination with restrictive racial covenants in many housing markets and discriminatory hiring practices set in motion the current conditions and maladies that afflict African American life (Burrell, 2010). The inability of large numbers of African Americans to secure stable (even subsistence) employment, live in secure housing, and regularly attend high performing fully funded public schools were remnants of those practices.

In a diverse stratified society where ethnicity affected how individuals perceived the character of others, the majority politic engaged in deliberative and sometimes unconscious exploitation of minorities (Dovidio, Glick & Budman, 2005). Hegemonic theorists suggested that



the exploitation of minorities was just and socially beneficial, that the inequalities of power and wealth distribution were acceptable, and gave the majority motive to oppress (Marger, 2009). Cultural capital, like any other form of capital, was subject to deflationary pressures (McVeigh, 2009). Therefore, limiting the number of individuals with a degree inflated the value of the degree in the market place. Blaming external factors, including educational reforms, as the culprit for this academic disparity rather than striving to dismantle White privilege had been tolerated. However, social class differential was possibly the most powerful determiner of inequality in society, and its roots were embedded throughout American legislation and litigation (Harper, Patton & Wooten, 2009).

#### Background

The educational achievement gap was a by-product of a racialized society. African Americans did not become over-represented in the lower class in America because of inferior genetic makeup – it was because the law allowed for ethnicity defined enslavement, segregation and removal from equal opportunity (Rothstein, 2004).

Gains made by the minority in the economic, social and political spheres in the United States were not chance occurrences. They were through deliberate confrontation and clashes with the power structure. When the majority had the ability to implement legislation to preserve and secure their favorable class structure, the cultural minority attempted to temper that legislation through litigation and resistance. When the U.S. Supreme Court affirmed the rights of White men, excluding African Americans from citizenship in the *Dred Scott v. Sandford, 1857* decision, the anti-slavery movement in the United States galvanized to sway public opinion. It sought out, published and widely distributed persuasive slave narratives. It supported safe houses



on the Underground Railroad and refused to recognize the Fugitive Slave Acts, culminating in the election of Abraham Lincoln in 1860, the American Civil War (1861-1865), the Emancipation Proclamation (1863) and the Reconstruction Period (1863–1877). During Reconstruction, the U.S. Constitution was amended ratifying the fourteenth and fifteenth Amendments gaining African Americans citizenship and the right to vote.

#### Landmark Legislation

Some of the landmark legislation, since the American Civil War, questioned how to further dismantle or restore the American class system instituted with ethnicity defined slavery. The U.S. Supreme Court decision, *Plessy v. Ferguson*, 1896, formalized second-class citizenship for African Americans by legitimizing Jim Crow segregationist practices. *Brown v. Board of Education*, 1954 combined with the Civil Rights Act and Affirmative Action Executive Order 11246 of 1965, set in motion practices and laws to dismantle the American class system making segregation unconstitutional. Those decisions as well as other court cases punctuated how ethnicity in America shaped the trajectory of African American achievement in their educational, social, political and economic life.

*Swann v. Charlotte-Mecklenburg Board of Education*, 1971 mandated the busing of African American schoolchildren as a tool for integration. *Milliken v. Bradley*, 1974 effectively blocked integration efforts by exempting Detroit suburbs from participating in busing, essentially condoning White flight and segregation. Those court cases established the parameters of inclusivity or exclusivity of African Americans in education (Anderson, 1988; Bennett, 1988; Harper, Patton, & Wooden; Lawrence III, 2006; Litwack, 1998).



During the 1970's, more minorities attended and graduated from college, held whitecollar positions and were making gains in achievement at every educational level. The Supreme Court case, *Regents of the University of California v. Bakke*, 1978, ushered in the conservative tide that successfully challenged and weakened affirmative action. Prior to desegregation of higher education, 90 percent of all African American students were enrolled at a Historically Black College or University (Harper, Patton, & Wooden, 2009). However, by 2001, there was a reversal in attendance patterns, with 87 percent of all African Americans in higher education enrolled at predominately White institutions (NCES, 2004).

#### **Statement of the Problem**

With more African Americans having attended predominately White institutions and social mobility tied to the attainment of degrees, the lag of African Americans in attaining such degrees was problematic in that it perpetuated their continued occupation at the bottom of the American class structure. Horace Mann, a nineteenth century American educator, believed that above all other human devices, education was, "the balance wheel of the social machinery" (Lynch & Engle, 2010). If earning a degree positively influenced every quality of life indicator, then not earning one negatively affected that life. The manifestations of the lower educational achievement was adverse health and incarceration statistics as well as losses of tax revenue and an increased dependence on public assistance (Belfield & Levin, 2007).

Less than a high school diploma was synonymous to a life of poverty. However, a high school diploma had limited financial mobility options. Research showed six pathways traditionally taken by low-income American high school graduates:

1. continue their education,



- 2. enlist in the armed forces,
- 3. join the unskilled workforce,
- 4. become chronically unemployed,
- 5. incarceration,
- 6. or die prematurely (Lee & Ransom, 2010).

The data confirmed that attaining a high school diploma, and thus a college degree, was a gateway to greater social upward mobility and increased an individual's economic opportunities by greatly influencing the type of employment, life income earnings, housing opportunities, positive health and incarceration indices, and many other quality of life measures (Belfield & Levin, 2007, Tinto, 2004). Education had been and continued to be an instrument of great importance because it controlled who gained access to upward mobility and social status in the United States and represented a bulwark against intergenerational downward mobility (McVeigh, 2009). The leadership within the Ku Klux Klan, a paramilitary hate group, frequently identified education as the most important way to affect social change, exploiting the fears and anxieties of individuals that they wanted to recruit, while subduing the ambitions of those they considered a threat to the White male dominance (McVeigh, 2009).

American Sociologist, W. I. Thomas surmised that if people defined a situation as real, such as the importance of a college education to upward mobility, then the situation was real in its consequences (Marger, 2009). Moreover, data confirmed the differential achievement and completion rates among major universities was a factor limiting upward mobility opportunities.

Comparative data from eight Michigan public universities dispersed throughout the Lower Peninsula showed the variances in graduation rates between African American and White



students. Table 1.1 showed the location of the university within the state, its membership as a public sector institution, its research designation as a Carnegie institution, and its athletic affiliation. The characteristics of the eight universities placed in context where Wayne State University (WSU) ranked as a leader in providing education in the state.

Table 1.1. College Characteristics for Select Michigan Universities

Institution	City	Sector	Carnegie Class	NCAA Division
University of Michigan-Ann Arbor	Ann Arbor	Public	Research Very High	Ι
Michigan State University	East Lansing	Public	Research Very High	Ι
Western Michigan University	Kalamazoo	Public	Research High	Ι
Ferris State University	Big Rapids	Public	Masters Medium	II/III
Oakland University	Rochester Hills	Public	Doctoral/Research	Ι
Eastern Michigan University	Ypsilanti	Public	Masters Large	Ι
Saginaw Valley State University	University Center	Public	Masters Large	II/III
Wayne State University	Detroit	Public	Research Very High	II/III

Data in Tables 1-4 retrieved from http://www.collegeresults.org saved search parameters

Table 1.2 provided a comparative look at the 2009 and 2013 six-year graduation rates looking at the 2009 selectivity of admittance of applicants and the 2009 median ACT Composite score of incoming freshman.

Institution	% Admitted	Open Admissions	Median ACT Composite	2009 6-Year Grad Rate	2013 6-Year Grad Rate
University of Michigan-Ann Arbor	42.20%	No	29	89.40%	90.00%
Michigan State University	70.00%	No	25	77.10%	77.60%
Western Michigan University	84.90%	No	22.5	54.10%	54.90%
Ferris State University	55.40%	No	21	45.90%	48.90%
Oakland University	78.30%	No	22	40.70%	42.90%
Eastern Michigan University	74.90%	No	21	39.70%	38.40%
Saginaw Valley State University	87.90%	No	21	38.10%	38.70%
Wayne State University	78.90%	No	20	31.70%	32.30%

Table 1.2. Admission & Graduation Characteristics of Select Michigan Universities

Table 1.3 provided the 2013 six-year graduation rate by ethnicity and gender for freshmen receiving federal financial support through the Pell Grant. In this research, Pell Grant recipient status was the proxy for low-income status. Of the eight colleges compared, WSU had



the largest number of Pell Grant recipients, an indicator of the level of poverty of the student body. WSU also had the lowest graduation rate for poor minoritized students.

Institution	%Pell Freshmen	2013 6-Year	Black Female	Black Male	White Female	White Male
University of Michigan-Ann Arbor	15.70%	90.00%	83.20%	69.10%	92.80%	89.70%
Oakland University	20.30%	42.90%	19.10%	23.50%	49.40%	41.80%
Michigan State University	23.90%	77.60%	57.70%	54.50%	82.40%	80.40%
Western Michigan University	39.70%	54.90%	46.40%	41.50%	59.30%	53.40%
Saginaw Valley State University	40.80%	38.70%	9.20%	13.20%	45.40%	38.70%
Ferris State University	41.20%	48.90%	43.80%	28.60%	50.40%	46.10%
Eastern Michigan University	44.70%	38.40%	26.40%	18.70%	49.60%	40.60%
Wayne State University	48.00%	32.30%	12.20%	8.70%	47.00%	43.20%

Table 1.3. 2013 Six-Year Graduation Rates by Ethnicity, Gender AND Pell Standing

Table 1.4 provided the 2008 to 2013 graduation rates of eight Michigan universities. Wayne

State University ranked eighth in each year.

Institution	2008	2009	2010	2011	2012	2013
University of Michigan-Ann Arbor	88.00%	89.40%	89.70%	89.50%	90.70%	90.00%
Michigan State University	75.40%	77.10%	72.20%	77.30%	79.40%	77.60%
Western Michigan University	55.10%	54.10%	52.20%	55.90%	55.60%	54.90%
Ferris State University	43.40%	45.90%	47.80%	40.00%	39.30%	48.90%
Oakland University	43.70%	40.70%	3970%	40.30%	43.40%	42.90%
Eastern Michigan University	35.70%	39.70%	37.70%	39.50%	37.20%	38.40%
Saginaw Valley State University	37.50%	38.10%	42.70%	38.50%	38.40%	38.70%
Wayne State University	33.60%	31.70%	30.90%	26.40%	28.10%	32.30%

Table 1.4. Six-Year Graduation Rates for Select Michigan Universities 2008 - 2013

#### **Purpose of Research**

The purpose of this study was to identify possible barriers as well as possible ways to support student retention through graduation of African Americans at Wayne State University. Within the historical and political framework outlined, the academic achievement gap at Wayne State University was viewed in the context of social and political subordination. Students



matriculating to Wayne State University from impoverished and/or minoritized neighborhoods often failed to graduate (Carnoy, 2005).

Rumburger, 2005 noted that where a student attended school made a difference in how much they learned and their chances of graduating; that the socioeconomic status of the children attending the school had a small yet significant affect on their learning and dropout rates. With communities more segregated by socioeconomic factors, it was deduced that those attending schools in the lower socioeconomic communities were not getting the same educational value as those attending schools in predominately affluent communities, which in turn impacted their ability to graduate prepared for the academic rigors of university study. The index of Dissimilarity, which measured segregation by residence, concluded that students from the metro Detroit area were very racially segregated with minoritized communities less able to access networks and resources in other communities (Farley, Danziger and Holzer, 2002). This research sought to understand why the dropout rate was disproportionately skewed toward African Americans in the lower ranks of academic achievement. Discussions of an educational system in crisis had been described as an exercise in the social construction of a social problem rather than an accurate assessment of the worsening conditions of the schools (McVeigh, 2009). Thus, the null hypothesis for this research was that ethnicity was not a factor in matriculation at Wayne State University.



#### **Research Questions**

The specific questions unique to this research were:

- What pathways did African Americans use to enroll at the university as compared to Latino and White students? Specifically, were they associated with a gateway program or did they enroll independently or non-attached?
- 2. Did participation in a university gateway program increase retention as measured by credits earned after two years?
- 3. Did county median household income, predict WSU graduation?
- 4. Did the enrollment trends of African American students differ from White and Latino students after one year as measured by credits earned?
- 5. Was there a correlation between high school cumulative GPA and WSU graduation?
- 6. Did treatment participants vary statistically in their academic preparation prior to college enrollment as measured by their incoming high school cumulative GPA?
- 7. Did ACT subject scores predict college persistence after two years the same across ethnicity?
- 8. Did students persist differently by ethnicity at the same high school cumulative GPA?
- 9. For WSU graduates, was there a statistical difference by ethnicity and gender in their high school preparation as measured by ACT Composite and high school GPA?

#### **Rationale for the Research**

There was a plethora of data chronicling the deleterious effects of an uneducated community. This study identified factors to support African American achievement with their White counterparts and addressed what could be done to support all students through graduation.



This was the gap in existing literature. Research exists regarding the academic achievement gap; however, this research was specific to one institution. This research explored how African Americans progressed within the university and determined that their lower graduation rate and lack of academic parity with other ethnic groups was not a derivative of their prior academic preparation as measured by high school cumulative GPA and ACT Composite score. That indeed, institutional barriers and culture were suspect.

#### **Overview of Literature**

The impetus for this research was a pair of articles written thirteen years apart describing the plight of African American students at WSU. The first, *Four Decades of Progress and Decline: An Assessment of African American Educational Attainment*, published in the Journal of Negro Education, in 1997, lauded WSU as one of the largest grantors of degrees to African Americans outside of HBCU's (Garibaldi, 1997). The second, *Wayne State's Black-White Graduation Gap Reflects Detroit's Struggles*, published in the Chronicle of Higher Education, in 2010, cited WSU as the worst public institution for African Americans to attain a baccalaureate degree compared to their White counterparts (Kiley, 2010). The juxtaposition of those two articles highlighted that something had gone terribly wrong in academia for African American students at WSU.

The Education Trust, a Washington DC based advocacy and research group, noted that WSU enrolled more African American students in the fall of 2007 than the other 49 public and private universities referenced in the Chronicle article (Lynch & Engle, 2010). With the ability of WSU to attract a viable African American applicant pool, then to admit and enroll them, it would be expected that the University would graduate them at the same or higher rate as schools with



lesser African American student enrollment. Data from the Education Trust website, <u>www.collegeresults.org</u>, showed that in 2013 Wayne State University's undergraduate African American student enrollment was 21.3 percent with a four year graduation rate of 11.2 percent.

The ethnic delineation in the graduation gap appeared to be more than a chance occurrence. The gap reflected the social class differential between African Americans and Whites residing in the counties served by Wayne State University. Wayne County, the largest feeder community to WSU encompassed Detroit, one of America's poorest and racially segregated communities. Other themes that added to that disparity were the lack of transportation, secure housing and subsistence employment.

This research was valuable since college completion had become a determinate of employability due to employers reinforcing this connection by placing a premium on higher educational attainment (Heller, 2001). The significance of the college completer achievement gap was that it disproportionately affected African Americans, making them more likely to occupy the fringes of society. Therefore, when employers placed a premium on education, higher education became a necessity (Belfield, Nores, Barnett & Schweinhart, 2006)

#### **Overview of Methodology**

This quantitative study was multifaceted. The data source was Wayne State University Banner software. Analyses were conducted on First-Time In Any College students, (FTIAC), enrolled from the years 2002 through 2009. Each year was treated as a cohort. The data were further analyzed by ethnicity and gender. The results of the analysis contributed to existing scholarship of African American student retention at an urban higher education setting, specifically Wayne State University (WSU). The research focused on the prior academic



preparation of African American and White students at the time of first college enrollment with differences in preparation determined by variables high school cumulative GPA, ACT Composite, ACT English, ACT Mathematics, and ACT Science scores. Latino students were included in the analysis as a comparative index to determine if the second largest involuntary minority ethnic group on campus achieved differently than African Americans.

This retrospective analysis compared enrollment trends, stop-out patterns, and retention and graduation rates by all WSU students, WSU graduates and WSU non-graduates. The results were then reported by ethnicity and gender. The goal of this research was to identify how ethnic groups differed in their preparation for college. Then, the research identified institutional barriers by eliminating variable differences in ACT scores, county of origin, and high school cumulative GPA to find the area that affected African Americans disproportionately from the other ethnicities.

#### Limitations

There were several limitations to this research outside of the control of the researcher:

- 1. The WSU TRiO Student Support Services' program received federal funds to serve 100 freshmen level students each year. Recruitment was coordinated through the Admissions office from January through June or until the program reached capacity. Students without access to email or who did not list an email address on their initial WSU application may not have been informed of the various conditional admit programs. This process may have served as a filter function eliminating the very poor without access to the internet.
- 2. Conditional admit programs, such as TRiO, could only serve a minimal number of the thousands of applicants that applied to WSU. Those students traditionally enrolled in



WSU with lower high school GPA's and/or ACT Composite scores and high financial need. The research answered the question of whether or not those factors impeded degree completion.

 Results from this statistical analysis of administrative data were subject to possible bias from omitted but relevant variables.

#### Delimitations

This quantitative study reviewed historical enrollment data to discern admission practices, student progression and graduation trends of African American students in comparison to White students at one institution. This research brought awareness to conditions at Wayne State University that could inform future decisions. However, the research may not lend itself to explaining the existence of the ethnic academic achievement gap at other colleges and universities. Secondly, the historical data did not reflect current or ongoing efforts by the university to enhance student achievement toward graduation. This research was a snapshot of the university relying on longitudinal data collected over a limited period at a time when the city of Detroit was experiencing record economic distress. Third, the years that this study covered were chosen because they bracket the time period that the researcher was employed at the institution and had a working knowledge of the students and institution being analyzed. Finally, a quantitative study did not lend itself to interpreting the nuisances of the human experience or intangible factors.

#### Assumptions of the Study

- 1. Non-White Ethnicity was a factor in academic achievement at WSU
- 2. Lower social status was a factor in academic achievement at WSU



- 3. Minority ethnicity combined with gender was a factor in academic achievement at WSU
- 4. That factors identified as impeding African American college completion could be remedied with the right type of research based interventions.

# **Definition of Terms**

Terms used in this dissertation that may be unfamiliar to readers were defined in the

following ways:

Admit Regular	Traditional or regular admit standards were a cumulative high school GPA of 2.75 or higher or an ACT Composite score of 21 or higher.
At-Risk	Those factors, (poverty, homelessness, reared in a single or no- parent household), that impede a child's ability to reach their full academic potential.
Gateway Programs	WSU has several gateway or conditional admit programs that accept students from underrepresented groups who may or may not have met traditional admissions standards of a 2.75 cumulative high school GPA or higher or an ACT Composite score of 21 or higher. Appendix A list those programs evaluated in this research.
Low-Income status	U.S. Department of Education defines low-income status as 130 percent of poverty level. Usually people who fall within this range receive state and federal assistance to meet basic subsistence levels for food, housing and clothing.
NCLB	The No Child Left Behind Act of 2001 was education reform proposed by President Bush in his first week in office and passed into law January 8, 2002 by Congress. The 2001 NCLB Act was based on four principles: accountability for results, more choices for parents, greater local control and flexibility, and an emphasis on doing what works in schools based on scientific research.
Racial Profiling	A practice by law enforcement personnel of using an individual's race or ethnicity as a key factor in deciding whether to stop or arrest them.



Redlining	The unethical practice of financial institutions perpetuated against African Americans and the poor to deny mortgages, insurance or access to other financial services based on geography without taking into consideration the qualifications of the individual or their creditworthiness.
Sundown Towns	A geographic area, neighborhood, town, city or county, where the residents were intentionally overwhelmingly all White and non-Jewish. The term came from posted signs that advised people of color to leave town by sun down.
Tri-County Area	The Detroit metropolitan area, often referred to as Metro Detroit, also informally as the Detroit Tri-County Area encompassing Macomb, Oakland and Wayne counties

#### Significance of the Problem

Administrators at WSU have sought answers to the cause of the student retention gap by gender and ethnicity. The Chronicle of Higher Education article, *Wayne State's Black-White Graduation Gap Reflects Detroit's Struggles*, appearing in the October 17, 2010 issue, placed a national spotlight on the institution. In response, screening, admittance and retention of students received critical attention in order to change the trajectory and experiences of African Americans through graduation. By understanding issues of access and student progression, this research informed efforts to improve the overall retention and graduation rates of all students at WSU. The significance of this research, supported by evaluative processes, helped to identify institutional barriers that could inform future policy initiatives in closing this gap.



#### **CHAPTER 2. LITERATURE REVIEW**

Title searches on the academic achievement gap using Google Scholar through WSU library identified articles, books and journals on the degree attainment differential between African American and White students. In addition, other authors frequently cited in the readings were included to develop this scholarship. The literature supported the premise that the disparity in academic achievement, distinguishable along ethnic, gender and class characteristics, was a product of a stratified society (Harper, Patton, Wooten, 2009; Rothstein, 2009). However, it was the contention of this research that in addition to a stratified society, a greater phenomenon operated within American culture. Like gravity, racism and racial discrimination in this country were ever present exerting pressure on people of color. They were forces that limited the academic mobility of ethnic minorities. Thompson Christman, 2013 identified systematic and institutionalized racism as a byproduct of a hierarchical ordering defined as Whiteness and White privilege. It was those concepts that were explored.

The first part of the chapter laid the groundwork with a brief history of race relations specific to Detroit. Next, this chapter focused on the scholarship addressing the educational achievement gap in the United States through the lens of educational public policy in the maintenance or temperance of White privilege.

As discussed in detail in Chapter 1, economic oppression, social exclusion and discriminatory governmental policies produced and perpetuated the marginalized status of African Americans in education and their diminished participation in greater economic opportunities (Blackmon, 2008; deMarrais & LeCompte, 1999; Harper, Patton, & Wooden 2009; Kozol, 2005; Litwack, 1998; Marger, 2009; Mincy, 2006; Minor, 2008; Payne, 2005; Peterson,



2006). So, too, was the case with African American students at WSU who continued to be affected by segregationist residue in contemporary America (Minor, 2008).

#### Historical Background for the Study

Detroit has had a long history of racial unrest. Segregationist practices systematically excluded African Americans from most housing in the region and routinely disenfranchised African Americans from entering the skilled labor market in the automobile industry. Ethnic communities were developed with many of the surrounding communities considered "sundown towns," places where ethnic minorities were not welcomed (Loewen, 2005). This practice, coupled with an influx of African Americans moving to the city from southern states lured by hopes of employment in the automobile industry, exacerbated racial tensions. Financial means did not protect affluent African Americans from discrimination. In 1925, Dr. Ossain Sweet and his family defended their home against a mob trying to force them from their neighborhood in Detroit on Garland Avenue (Marable, 2011). In 1942, tensions rose when African Americans began moving into the Sojourner Truth housing projects. The citywide race riots of 1943 and 1967 ended only after federal troops restored peace. The 1973 election of Coleman Young, Detroit's first African American mayor, was a racial event with 90 percent of African Americans and ten percent of Whites supporting him. The 1992 fatal beating of an African American motorist, Malice Green, who was pulled over for a traffic stop by two White police officers, highlighted the police practice of racial profiling (Poremba, 2001).

This glimpse of Detroit's racial history provided the context for the social environment in which WSU faculty, staff and administrators lived and worked. Those employees, the majority of which were White, served African American students who were also a minority on campus. With



students educated similarly, comingling within the integrated classrooms and limited residential units, why then were there variances in graduation rates? The blatant and subtle forms of discrimination must be suspect in the continued subpar advances African American students were making toward graduation at WSU.

#### **Credentialing Movement**

The National Commission on Excellence in Education, 1983, A Nation at Risk report added to the credentialing movement by defining the education problem as the failure of the public school system. The report identified the lack of a higher skilled labor force to compete globally as an indictment of the nation's public schools (Curtler, 2006). The report also paved the way for student assessment using standardized tests as legislated in the No Child Left Behind Act 2001 (NCLB). The NCLB legislation was to bring equity to learners from all backgrounds including the socioeconomically disadvantaged and non-native English language speakers. However, the most vulnerable students were removed for various reasons such as pregnancy, incarceration, declaration to take the GED exam or declaring intent to transfer to another district (McNeil, Coppola, Radigan, & Heilig, 2008). In 2012, President Obama allowed ten states to drop the NCLB law in exchange for higher standards approved by the administration (Feller, 2012). Michigan successfully applied for and received administrative approval to waive the NCLB requirements through the 2014-2015 academic year reported in the Detroit Free Press July 19, 2012, article Michigan Granted waiver from No Child Left Behind Act. In 2015, President Obama signed a new education law replacing NCLB with the Every Student Succeeds Act (ESSA).



#### **Theoretical Framework**

The seminal works of Schlesinger's Cyclical Theory and Derrick Bell's Critical Race Theory (CRT) which later was adapted by Ladson-Billings, Tate, Parker and others for use in education, provided the conceptual framework for this study. It was in the linking of Cyclical and Critical Race theories that provided insight to understand the life experiences of African American students at Wayne State University – experiences that have led to their lower representation in the ranks of graduates.

#### **Cyclical Theory**

Father and son historians, Arthur *Schlesinger* – senior and junior, developed the Cyclical Theory. They showed that when the value shifts occurred in the larger society, the schools made accommodations and those accommodations occurred in roughly fifteen year increments (Cuban, 1990). Those increments reflected generational attitudes or the amount of time for an individual to formulate ideas independent of their parents. During liberal eras, the focus turned to concerns for minorities and the poor, resulting in school to work programs and reduction in the achievement gap. At those times, White privilege interests were low. During conservative political eras, schools were concerned with producing students who could compete. In turn, White privilege interests were high.

#### **Critical Race Theory**

Critical Race Theory questioned viewing Whiteness as normal without thought of the oppressors or the oppressed. Those responsible for creating deplorable educational facilities and conditions did not have to witness that despair. Tyack and Cuban, (1995) gave an example of racism as parents not wanting other children to have more of an advantage than their own



children. In this instance, the racism was subtle. Of course, parents should want the best for their own children. However, the problem occurred when that thinking, followed by behavior, lead to the implementation of policies and practices that relegated a segment of the population to the fringes of society. Critical Race Theory provided analytical tools for the scholar to deconstruct how race and ethnicity were present in decision-making circles so that equity became the goal rather than one-upmanship.

The tenants of CRT:

1) That racism and racist practices may manifest themselves in institutions that espouse equity and social justice.

2) That the view of colorblindness created a lens though which the existence of race could be denied and the privileges of Whiteness maintained without any personal accountability.

3) That it was important to give voice to people of color honoring their unique experience.

4) That the White power structure tolerated or encouraged racial advances for Blacks only when they also promoted White self-interest.

5) That the experiences of people of color be reflected in the recording of history.

6) That race was recognized as a social construct, understanding that racism was a means by which society allocated privilege and status.

7) That mainstream cultural claims of meritocracy that sustain White supremacy in its belief that colorblindness would eliminate racism must be rebuffed, that racism was a



matter of individual versus systems and that all isms must be challenged (Thompson Christman, 2013, Harper & Wooden, 2009).

#### White Privilege

Cheryl Harris, 1993 developed the concept of Whiteness as property. She hypothesized that privilege or Whiteness was a resource of considerable value and investment receiving massive legal protections (Ladson-Billings & Tate, 1995). The greatest importance of those inequalities and privileges were that they were cumulative and intergenerational. When DuBois spoke of the duality of being Black in America, he gave voice to what African Americans and other ethnic groups have intuitively known both past and present. That rewards followed being White in America. This fact had been punctuated throughout American history with African Americans as well as other immigrants "passing" for White and assimilating to White culture by truncating or changing their names to more European names, as well as skin "Whitening" procedures marketed to melanin rich peoples.

As early as 1920, W.E.B. DuBois addressed the issue of Whiteness calling it a privileged color against which all other colors were measured and that it was a matter of White ownership of the earth forever and ever, Amen (Thompson Christman, 2013). Couching his definition in biblical language punctuated that DuBois saw this ownership as deliberate, purposeful, something that was maintained. The systematic pattern of inequality by ethnicity suggested a society organized along caste, not class lines and that those inequalities always seemed to favor Whites (Belfield & Levin, 2007). Kozol, 1991 stated that though there was a deep-seated reverence for fair play in the United States and a genuine distaste for loaded dice that was not the case in the areas of education, health care or inheritance of wealth. In those elemental areas, the



privileged wanted the game to be unfair and have made it so; and it would likely remain. As it was with public education, the American government perpetuated inequality. The schools operated in a system that preached fairness yet practiced injustice, as proofed by the stunning consistency in which the state underfunded poor schools (Kozol, 1991).

Aligning closely with Bell's Critical Race Theory, Allport's research identified the *Integrated Threat Theory of Prejudice*. Meaning, individuals who identified with high Right-Wing authoritarianism values were especially sensitive to threats to traditional values. This group would display negative attitudes and behaviors toward those seen as holding different values than their own (Dovidio, Glick & Budman, 2005) In a stratified society demarcated by ethnicity, the thinking was often characterized as not wanting other children to have more of an advantage than their own children (Tyack & Cuban, 1995). Poor children have never been a well-represented constituency in education because they were overwhelmingly represented in the ranks of 'other' in America (McDermott, 2006). Historian, George Fredrickson realized that with White privilege the majority accepted as normal the cruel and unjust treatment and conditions placed on the ethno-racial other that would be unacceptable if forced upon them (Marger, 2009).

#### White Privilege vs. Equity Agenda in the Federal Government

Public policy has been an apparatus in the maintenance or temperance of White privilege. Fueled by public opinion, the United States government had the authority and power to determine the direction of many aspects of economic, social and governmental policies. However, those policies were subject to administrative changes and did not always lead to sustainable progress (Harper, Patton & Wooden, 2009). Public policymakers relied on their core values to form judgments concerning proposed courses of action (Marshall, Mitchell, & Wirt,



1989; Peterson, 2006). In the political landscape, terms like equality or traditional values were the rhetoric of liberals and conservatives. President Lyndon Johnson implemented Great Society social programs to equalize opportunity to uplift the poor and disenfranchised during the 1960's. In the 1980's, President Reagan, who believed that government should be small, supported traditional values and a reduction of spending on social programs in order to limit control of the nation's resources to those who had always held it (Bennett, 1988; Hacsi, 2002).

The presidencies of those two men were important to this research in that they reflected a cyclical view of the ebb and flow of public opinion infusing public policy. Those two philosophical giants came to power at pivotal periods in America with one diminishing and the other perpetuating White privilege interest. There was a twelve-year difference between the end of Johnson and Reagan's terms. This was consistent with Cyclical Theory in that value shifts occurred in roughly fifteen-year increments. Both men served two terms. They both raised awareness for public education. They both implemented reforms. However, their beliefs as to the role of the federal government to eradicate social ills had very different educational and life outcomes for those affected by their policies.

The tenor of the country that Johnson inherited was wrought with social tensions. He assumed the presidency after the assassination of President Kennedy. The country was engaged in the Vietnam War. President Harry Truman had desegregated the armed forces and many agitated for greater racial-social integration concurrent with the fight for civil and voting rights. With a highly politicized generation of baby boomers challenging traditional ideas on marriage, sex, and women's roles at home and in the workforce, public opinion aligned with equity issues, showing a decrease in preserving White privilege interest.



President Johnson set out to build a great society through the implementation of social policies that he believed would change the economic, social and class status of the poor. He believed his Environmental, Civil, Educational and Social legislation would dismantle the caste-like social systems of opportunity that differentiated Black and White achievement (Bennett, 1988; Harper et. al. 2009; Lawrence III, 1987; Rothstein, 2004). Many of the children of this generation, or already in the educational pipeline, would have experienced Johnson's educational reform policies – in particular, the Higher Education Facilities Act, 1963 establishing grant programs and making community colleges more accessible; the Elementary and Secondary Education Act, 1965 establishing Head Start as a permanent program; and the Higher Education Act, 1965 increasing university budgets and resources, and creating TRiO initiatives – Upward Bound, Talent Search, and Student Support Services program, collectively known as TRiO. Johnson's initiatives broke the logjam that had prevented the use of federal funds in education for fear of race, religion and federal control issues and increased federal spending on education by 1400 percent during the 1960's and 1970's (Hacsi, 2002).

The viable solution to address concerns of access to higher education offered by the Johnson administration came in the form of federal and state spending equaling around \$50 billion (Peterson, 2006). As in the Elementary and Secondary Education Act – which stipulated for the first time that programs receiving government funding provide data driven evidence of their effectiveness through annual reports – so to with this new legislation, known as the Higher Education Act of 1965, (Hacsi, 2002). In addition, the law strengthened the educational resources of colleges and universities and made resources available to individuals. The purpose of those programs was to help historically underrepresented low-income students gain access to



post secondary institutions and help with their acclamation process once there. Through this Act, students were eligible to receive financial resources through the creation of the Pell Grant program and the availability of low interest loans (Belfield & Levin, 2007; Tinto, 2004).

By the time Ronald Reagan took the oath of office, public opinion had shifted from Johnson's America. Many Americans believed that Affirmative Action initiatives had run amuck. The handling of the Iran hostage crisis raised perceptions that America needed stronger leadership. His solution, coined Reaganomics or trickledown theory, was touted as a cure to raise the American economy from a massive economic recession by investing in the wealthy, believed to create jobs, the masses and the economy would lift. However, this period, considered a backlash to liberal policies, saw the closing of mental hospitals with residents released to the streets, a loss in federal funding for social programs aimed at supporting subsistence levels for the poor and the rise of a new class of people known as homeless. The conservative value structure did little to eliminate the inherent racial aspect to disparity in economic, social and educational achievement. Therefore, educational reform during this period only illuminated the differences in achievement rather than reduced those differences.

The significance of the dialogue shift from Johnson to Reagan's educational reform was that it took the focus off the systemic cause of inequality, that Johnson's policies addressed – ethnic stratification, by equity in education solutions, and placed the focus on an outcome of the inequality (Johanngmeier, 2010). This inequality, being a lesser-prepared high school graduate resulting in a lesser-prepared worker, signaled the end of the social reform legislation formulated by President Johnson and ushered in a conservative agenda relying more on standardized assessment scores less friendly toward the poor (Harper, Patton & Wooden, 2009; Rothstein,



2004). The conservative educational reform legislation had its genesis in the Reagan administration with a *Nation at Risk* report, the Charter school movement and No Child Left Behind where conservatism was redefined. This transition caused public schools to serve many masters with many of their task contradictory and whose implications defined educational goals and reform (McDermott, 2006). The programs that Johnson had implemented were now in opposition with the newer policies.

Many policies embedded within mainstream, racist and hegemonic framework consistently questioned the worthiness of African Americans as educated citizens and the legitimacy of their presence in higher education. In larger society, treating minorities poorly was justified through the use of statistics showing ethnic minorities as lesser than – less civic minded, less employable, less educated. Those facts, believed pointed to a genetic deficit that African Americans did not possess the mental capacity to learn, nor did they have any real need for formal postsecondary education. Therefore, better schools or social change would do little to affect those lives. The idea that African Americans were intellectually inferior was engrained in the fabric of education. Racism went beyond education, the United States, founded on racist principles, impregnated with systems that perpetuated this ideology infused education. The reality of poverty or inadequate public schools or racial segregation did little to sway public opinion (Kozol, 1991).

The role of government to educate its citizenry had been very different for people of African descent compared to those of European descent, particularly as it related to economic investment. Those of African descent in the United States had to go through legislative processes to force the government, industry, and other Americans to treat them with equal protection under



the law. Public education was no exception. Concerns about the re-segregation of the schools or the rationale behind desegregation did not raise the ire of the public and hence public officials and courts (Kozol, 2005).

deMarrias & LeCompte, 1999 incorporated John Ogbu's analysis of minority. Ogbu surmised that there were different types of minorities and depending on the type determined how that person would be treated in America. He identified the Autonomous Minority, as the ethnoother by religion such as being Jewish, Mormon, or Muslim, distinct primarily through their religious practices. Next, Ogbu defined the Voluntary Minority, those seeking freedom from persecution, such as the mass exodus of the Syrian, Kurdish and Croatian peoples. Finally, the Involuntary Minority, whom Ogbu defined as forced assimilation – Native Americans, Mexicans and Africans. This group, physically identifiable, was less able to assimilate into traditional American life and primarily existed in the shadows within American culture. As Congressman Augustus Hawkins once asked, "What do you do with a former slave when you no longer need his labor?" the same can be asked of the Native American when you no longer need his labor?" the same can be endisplaced.

Cornell West added to this scholarship questioning why discussions on race in America conclave around the Involuntary Minority. Those discussions of the problems in America were bracketed by ethnicity. The academic achievement gap was the difference between White and Black performance. West questioned why issues were defined as the problems Black people posed for Whites occurred in the first place, rather than discussion on how viewing ethnic minorities that way revealed about our nation (Thompson Christman, 2013). Alternatively, as Kozol stated, what can be done about the values of the people who segregated those



communities? There was no academic study of the pathological detachment of the rich, although it would be useful to society to have some understanding of those matters. Fine (2004) addressed the crisis of Whiteness, "I worry that by keeping our eyes on those who gather disadvantage, we have failed to notice the micro practices by which White youth, varied by class and gender, stuff their academic and social pickup trucks with goodies not otherwise available to people of color."

Kendall Thomas, a Critical Race theorist, attempted to deconstruct assumptions that the race problem was a Black problem. He argued that people did not have a race, that in fact, they were "race-d." Meaning they were assigned and invested with races. That scholars needed to disassociate race with being human and view race as a product of social practices (Harvard Review). This aligned with Ogbu, people were sorted and accepted based on how different they were from the standard of Whiteness.

An article title, *Teacher apologizes for slavery references in math homework*, published in the Detroit News January 2012 illustrated this point. The Atlanta teacher assigned math homework that included a 20-question assignment that used tales of slave beatings and field labor. One problem read, "If Frederick [Douglass] got two beatings per day, how many beatings did he get in one week?" Another asked, "Each tree had 56 oranges. If eight slaves pick them equally, then how much would each slave pick?" The guise of the assignment was the teaching of math concepts. The reality of the assignment was that it reinforced historical subjugation of African Americans, legitimizing it through the teaching of math concepts, while heightening ethnic divisiveness and rank. Those practices were symbols of racist ideology met to impart feelings of inferiority to ethnic minorities and superiority for the ethnic majority about who they were and whom they would be.



From a regional perspective, the African American students matriculating to Wayne State University in the 1990s grew up in the post Johnson era. Those students would have been more likely to have experienced some of Johnson's reforms in the form of Head Start or received free or reduced lunch that aided in their academic preparedness, as opposed to Reagan era students. The reality was that students attending WSU in the 1990s did better than those matriculating in 2010. As noted in the Journal of Negro Education, *Four Decades of Progress and Decline: An Assessment of African American Educational Attainment*, those students were attending and graduating in numbers comparable to African American students enrolled at HBCU institutions. The success of African American students at WSU could be attributed to the fact that Wayne State University had a lenient enrollment policy with a social environment conducive to their success.

During the 1980s and 1990s, WSU relied less on college admission exams such as the ACT or SAT. The college had successfully competed for and received the TRiO Student Support Services' grant funded through the Higher Education Act of 1965. This grant aimed to provide support, both financially and socially, to facilitate the transition of low-income first generation students to college. The city of Detroit was under the leadership of its first African American mayor, Coleman Young, who was bold in his pro Black posturing and advocacy for African Americans. Students were able to secure Pell grants that often fully funded their education, allowing them to graduate without securing debt or dependence on family financial contributions, which in many cases were nonexistent. Finally, many of the students were local coming from neighborhoods adjacent to the university. They were not geographically displaced and therefore did not to have to navigate another barrier.



The polarized educational environment in Michigan with challenges to affirmative action juxtaposed with a large African American community and White flight changed the trajectory of the 2010 Wayne State University African American students as compared to their 1990 predecessors. The Chronicle of Higher Education article, *Wayne State's Black-White Graduation Gap Reflects Detroit's Struggles* referenced something had changed.

Wayne State University adopted stringent new policies in 2000 aligning with the culture instituted with a Nation at Risk and with the assessment movement. Admission standards were raised requiring minimum SAT/ACT scores. In addition, requirements for graduation changed. Students needed to pass minimum mathematic and English proficiency. In addition, remediation courses at the university level were assigned self-paced computer-based instruction rather than taught by seasoned subject certified instructors. Pell grant restrictions were implemented, forcing low-income students to rely on parent income status rather than their own resources thus incurring debt. The ability to file as independent was changed from living separate from one's parent(s) or orphaned, to the students' now either being a parent themselves, a military service person, age twenty-six or older, in addition to poverty level requirements. Skyrocketing college tuitions beginning in the 1990s outpaced the flat Pell grants. While financial aid also increased, students with the largest family incomes received the largest increases in aid. For public institutions, the cost to attend college represented roughly 6 percent of income for students from high-income families and 71 percent for students from low-income families. Those changes had the effect of stalling low-income students in the educational process or worse yet, stopping them from ever enrolling due to their inability to finance their first semester (Tinto, 2004).



As the university closed it ranks, the city of Detroit changed. The city was particularly hard hit by the factors contributing to poverty stemming from a lack of education and the circular affects this had on employability, incarceration and the inability to maintain permanent housing. The Detroit News April 2, 2009 reported that according to U.S. Census Bureau and Internal Revenue Service data, "every day, Michigan got less populated, less educated, and poorer because of outmigration." Michigan was in the midst of an economic and educational transformation. The state was experiencing record multi-year budget deficits; the decline of the automobile industry had been termed "carmageddon" by auto insiders; and the Detroit Public Schools lost nearly 80,000 students (Detroit News April 2, 2009). Increased competition from charter and private schools, as well as families moving out of the state due to displacement from the work force contributed to the decline.

In addition to reasons given by the State, additional problems plagued the Detroit Public Schools. The graduation rate of ninth graders from high school was 25 percent, the national average for the class of 2004-2005 was 74.7 percent [Source: National Center for Education Statistics, 2008]. The illiteracy rate for Detroit residents was nearly 50 percent, with 60.1 percent lacking a high school diploma. Crime and corruption uncovered in the school district further contributed to the hemorrhaging of students [Source: U.S. Census Bureau, 2000]. This convolution of events attracted national attention. In the summer of 2009, *Time* magazine commissioned a yearlong project titled, "Assignment Detroit." *Time* purchased a home and stationed journalists, photographers and bloggers with the charge of bringing attention to this crisis and the hope of documenting the city's recovery (Time, September 24, 2009).



It was against this backdrop of high unemployment, failing public schools, unfettered crime and rampant violence that students were emerging seeking admittance and enrollment into Wayne State University. Located in Southeastern Michigan, in the heart of the city of Detroit, Wayne State University served a blue-collar, working class population. Of the 31,786 students' enrolled fall 2009, 90 percent came from the tri-county areas of Macomb, Oakland and Wayne with 20 percent from Detroit [Source: WSU Office of the Registrar, September 2009]. The average American College Testing (ACT) score and GPA was 21.5 and 3.13 respectively [Undergraduate Admissions]. The minority student body was 41.1 percent, with African Americans making up 31 percent. A profile of a typical WSU student was female, 22 years old, of European descent, had attended college before, and took just over 10 credit hours. This description was consistent with the national college going profile (Tinto, 2004).

However, enmeshed in the profile of the average WSU student another picture emerged. There were more federal Pell grant recipients at WSU, than at any other Michigan research university. Specifically, receipt of a Pell grant indicated the financial need of the student due to their inability to pay to go to college. In July 2009, metropolitan Detroit's unemployment rate was a record 28.9 percent (Detroit News, August 15, 2009). The majority of WSU students, 62 percent, came from households in which the parent or guardian did not graduate from college. Of the 20,766 undergraduate students, 94 percent commuted from their neighborhood that may have included high levels of segregation, poverty, violence and social and cultural disintegration. Often those students lacked options to leave their communities due to financial constraints and other restrictions, therefore, WSU became much more than college, their brighter future depended on enrolling and graduating from the university to secure the credentials needed to



become marketable in order to escape poverty. Yet, their high school preparation often did not prepare them to be successful in this environment.

The Journal of Postsecondary Education Opportunity described the low-income student experience as an uphill battle. It stated that those students represented a very large, rapidly growing, and severely underserved group within higher education. The share of bachelor's degrees awarded to students from the bottom quartile of family income by age 24 was 9.0 percent in 2007, down from 14 percent thirty years ago. The educational pipeline sorted students according to the family income into which they were born. Those children who were born into poverty graduated from high school at the lowest rates, continued their education at the lowest rates, and completed bachelor's degrees at the lowest rates. By age 24, only about one in ten earned a bachelor's degree [Source: Postsecondary Education Opportunity January 2009 (number 199)]. When age limitation was removed, those students from high-income families, earning \$70,000 or more, 56 percent earned a four-year degree within six years as compared to students from low-income families, less than \$25,000, earned a bachelor degree at the rate of 26 percent (Tinto, 2004). Tinto also found, that when financial barriers were removed, Pell grant recipients did as well as higher income non-recipient students who from the NCES 2002 report were considered to be academically better prepared.

Jonathan Kozol's Savage Inequalities was an industry standard in describing the deplorable conditions present in many poor urban public schools, including Detroit Public Schools. The conditions exist because the public policy that regulated funding rarely affected the individuals responsible, nor did their children have to experience the despair. The New York



Times reported that if the dream of equity were ever fulfilled for poor districts, the richer districts would think they were living a nightmare (Kozol, 2006).

Plumbing was what separated the United States from many under developed world countries; yet, in many of our urban poor public schools, sanitation continued to be a problem. Lawrence III, 2006 added that when toilets were broken, ceilings leaked, when there were no gifted or advanced placement courses or when Black students were discouraged from taking them, those practices and conditions like segregation were symbols of racist ideology. They generated feelings of inferiority. Like segregation, they sent a message. Faulty and failing infrastructure combined with deficit model existence was the normal for many poor children. They attended schools lacking budgets for toilet paper, textbooks, qualified teachers, advanced placement courses, laboratories, libraries and the list continued.

"If they first had given Head Start to our children and pre-kindergarten, and materials and classes of 15 to 18 children in the elementary grades, and computers and attractive building and enough books and supplies and teacher salaries sufficient to compete with the suburban schools, and then come in a few years later with their tests and test-demands, it might have been fair play. It is in many of these schools that children are taking these standardized test and falling below the norm. These schools and the children in them have been given less but ultimately will be judged by their performance on the same test. Instead, they leave us as we are, separate and unequal, underfunded, with large classes, and with virtually no Head Start, and they think that they can test our children into a mechanical proficiency" (Kozol, 1991).

The hypocrisy in our educational system holding inner-city children accountable for their performance on a high-stakes standardized exam but not the government officials responsible for producing the conditions in which they learn was reprehensible (Kozol, 2006). This hypocrisy could be illuminated through Cyclical and Critical Race Theory analysis in developing scholarship to address those disparities in education.



Derrick Bell's work has been expanded situating it in interdisciplinary fields from law and legal issues to education, history, political science, literature, sociology, ethnic and women studies (Lee, 2008). Johnathan Kozol, Richard Delgado, Cheryl Harris, and Ladson-Billings and Tate have built on this scholarship exposing systemic racism challenging others to unmask Whiteness that has had a debilitating hold on peoples of color, holding them in perpetual servitude to our economic system of capitalism.

## White Privilege vs. Equity in the Courts

The American judicial system was not immune to cyclical influences in public opinion. The courts have been used as a tool, complicit in perpetuating White privilege interest; therefore, it must be vigilant in dismantling this privilege. The U.S. Supreme Court case *Brown v. Board of Education of Topeka, 1954* with ethnicity-defined parameters, was the first case to address and temper White privilege interest in public education. The goal of this decision was to equalize resources available to African American children through the public schools. However, court decisions reflect majority tolerance toward education integration.

Research has shown that typically, White students attended schools with a diversity ratio of 6 percent Black and 5 percent Hispanic. When this ratio shifted upward, White flight occurred (Peterson, 2006). Such was the case in Michigan. Support of White interest led to the challenge of *Brown* in the *Milliken v. Bradley* 1974 decision (Peterson, 2006). In this decision, the court exempted suburban districts from assisting in the desegregation of 53 districts in the metropolitan Detroit inner-city school systems and subsequently allowed White-flight from cities to suburban school districts. Farley, Danziger and Holzer, 2002, found that the index of



Dissimilarity, which measured segregation by residence, concluded that 89 percent of African American or White residents of Detroit would have to move to end segregation in this area.

Jean Anyon captured a perceived threat to values over desegregation in her ethnographic study of schools in a relatively homogeneous environment of which 85 – 100 percent of the students and school personnel were White in 1979. She found that when the parents in the Executive Elite public school learned that their school was to be integrated, they threatened to pull their children out and place them in private school until the threat of integration was dropped. Jonathan Kozol's report of inequality in schools found that 50 years after the *Brown* decision, as many as 99 percent of the schools he visited were segregated, and asserted that it appeared that it was the belief of many people that the segregation issue was a "past injustice" that had been sufficiently addressed (Kozol, 2008). However, Kozol's analysis showed that the separation of the races was closer to *Plessy* 1896 and that a dual society, at least in public education existed, and that reality, in general appeared to be unquestioned.

#### Affirmative Action Executive Order Under Attack

Other court cases followed Michigan's *Milliken* decision redefining the direction of educational reform from *Brown* by launching an attack on affirmative action legislation that had been effective in leveling the playing field and giving minorities and women unprecedented opportunity and access to education and industry. In *Regents of University of California v. Bakke* 1978, the court ruled that it was unconstitutional for the university to admit students based on race alone. Eighteen years later, *Hopwood v. Texas* 1996 affirmed the *Bakke* ruling that race could not be used as a determinant to facilitate a diverse student body, citing equal protection under the law. In the 2001, *Bakke* was upheld in the *Smith v. University of Washington Law* 



school decision. Michigan entered the national spotlight in the *Gratz v. Bollinger* 2003 decision successfully challenging the efficacy of the University of Michigan undergraduate point based admission policy. Those court cases successfully challenged affirmative action policy in higher education admission practices.

Minority students at the University of Michigan Law School gained a victory in the *Grutter v. Bollinger*, 2003 when the court affirmed the use of affirmative action to achieve a state goal in admission practices. However, undergraduate admissions processes were still restricted in the use of diversity tools. Those challenges and continued challenges, such as the December 9, 2015 Supreme Court decision on the *Fisher v. University of Texas* challenge to affirmative action, illuminated that many believed affirmative action policies were necessary (Mencimer, Stephanie, Mother Jones, 120915). Justice Scalia lamented that Blacks belonged at slower colleges, again called into questioned the legitimacy of African American enrollment in predominately-White institutions citing increased minority enrollment curbed enrollment and graduation rates of minority students. In *Abbott v. Burke II*, 1990 the New Jersey Supreme Court eloquently summed up the role of the federal government to equity in education in relation to school funding. They noted that if the claim was that disadvantaged children simply could not make it, then the constitutional answer was to give them a chance (Belfield & Levin, 2007; Kozol, 1991).

The literature, replete with authors who referenced the *Brown* landmark case, dissected the academic achievement gap along ethnic lines. Peterson, 2006 argued that segregation, enforced by law, conferred inferior status on Black children impeding their ability to learn. He believed that the difference in academic achievement was a consequence of a lowering of their



self-esteem in comparison to White children. Therefore, ending segregated schools would eliminate this judgment of inferiority, improve Black self-esteem and motivation, and raise their academic achievement. This raising of self-esteem, coupled with increased school resources and exposure to higher achieving White students, was hoped would eradicate the achievement gap.

However, liberal critics of the Reagan era noted that social policy in the United States, to the extent that it concerned Black and poor children, had been turned back several decades. But this assertion, which was accurate as a description of some setbacks in the areas of housing, health and welfare, was not adequate to explain public education. In public schooling, social policy had been turned back almost one hundred years (Kozol, 1991). The courts and public policy had been successful in leading school districts to end de jure segregation; however, de facto segregation remained and was more difficult to dismantle as social, economic and political forces aligned to keep African Americans in segregated schools (Harris et al 2006).

## Why Reform Education

With so many issues demanding the attention of our politicians, why have policy makers continued to choose education for reform? The simple answer was that it was conceivable. Politicos used education reform as a lightning rod galvanizing public opinion to further their political agenda because it was a public good affecting every American, requiring little explanation for buy-in. Education reform was public policy and policies shaped interest. Palumbo and Calista (1990) identified five measures for successful public policy. First, that the legislation correctly identified the causes of the problem it hoped to address. Second, that the legislation was unambiguous, clear in its objective. Third, that those in charge of implementing the legislation bought-into the purpose of it and administered it according to the intent and letter



of the law. Fourth, that the legislation received wide support from the stakeholders. Fifth, that future legislation would not undermine current legislation. President Johnson's Head Start program met the criteria for good public policy.

## **Early Education Reform Success**

Early intervention in the form of Head Start provided societal benefits that far outweighed the cost (Belfield & Levin, 2007; Harris & Herington, 2006; Mincy, 2006). With the changing roles of women in the work place and home during the 1960's, Head Start was a public policy that addressed their needs and helped their children. However, this government-funded program designed to prepare disadvantaged children for public school and credited for introducing the concept of preschool to the national consciousness under Johnson had a different clientele by 1990 (Hacsi, 2002). In the early 1990's, 76 percent of children in the richest communities in Massachusetts were in preschool compared to only 35 percent in the poorest communities. Access to preschool during this period was linked to community wealth within a national geographic region. An additional study reported that preschool programs were fifteen times more available in affluent counties than in their intended very poor counties (Hacsi, 2002). The redistribution of resources for the benefit of the poor had been a problem of school reform in that the majority often reabsorbed those resources intended for the poor.

The literature was dense with authors extolling the advantages of early educationally based interventions. The hypothesis that Belfield, Nores, Barnett and Schweinhart researched was whether early intervention resulted in raising the overall quality of life for participants (Barnett, 1992; Belfield & Levin, 2007; Hacsi, 2002; Heckman, 2011; King, 1994; Kozol, 1991; Lawrence III, 2006; Peterson, 2006; Rothstein, 2004). An industry standard, the High Scope



Perry Preschool program located in Ypsilanti Michigan, best illustrated the effectiveness of a quality preschool program. The program examined the lives of 123 at risk participant and control group children who were preschool age in the 1960's. The early intervention the program participants received in the form of intensive preschool instruction, group parent meetings, home visits and small size structured group activities resulted in high positive returns for society and increased personal capacities enjoyed by the individual (Belfield & Levin, 2007). Those children, as opposed to children in the control group, were more likely to graduate from high school; be civic-minded adults; have higher lifetime earnings; avoid or have lesser involvement in the criminal justice system; delayed child bearing to older years; and were less likely to need welfare benefits.

The benefits the High Scope Perry Preschool children experienced as compared to their control group counterparts have been well documented in changing the life trajectory of the poor and minority students that President Johnson and Sargent Shriver intended (Belfield & Levin, 2007; Peterson, 2006). There have been six different interval studies documenting the effectiveness of the program over a thirty-six year period. The first evaluation occurred at the end of the treatment period, another when they were age 10, again at age 15, at age 19, at age 27 and the most current follow-up was of the children at age 40. At each interval, the cost-benefit analysis conclusively supported the investment in preschool education outweighed the cost to provide that type of intervention and that individual behaviors impacted during the treatment period resulted in future life chances that optimized opportunities for self-development and improvement changing the life changes of study subjects and subsequent generations (Belfield, Nores, Barnett & Schweinhart, 2007).



This democratic wave of reform penetrated the systemic causes of inequality in American life for minorities and the poor. In the early seventies as racial segregation in academia decreased, test scores increased (Peterson, 2006). Although school desegregation did not begin to gain traction until about 1968, this policy combined with the Civil Rights Act of 1964 and restricting the distribution of federal funds to segregated schools, was having its intended effect (Harper, Patton & Wooden, 2009). During the 1970's and 1980's, the academic achievement gap in reading between Black and White 17-year-olds had closed by 60 percent between 1971 – 1988 (Belfield & Levin, 2007; Peterson, 2006). Researchers suggested that if the pace had continued at the same rate after 1990, the academic achievement gap would have closed within the next decade (Peterson, 2006).

The results of the Perry preschool program and the fifteenth anniversary report on the success of head start did not influence President Reagan's stand on serving the poor (Hacsi, 2002). His brand of conservatism was based on securing freedom for the wealthy to invest their capital in job-creating enterprises rather than into the bureaucracy. To that end, legislation formulated by President Johnson and even those from the New Deal era from President F. D. Roosevelt were weakened. Indicating a rather callous attitude toward the poor, Reagan unleashed a blitz of proposals to slash social programs and went as far as to propose ketchup to be a vegetable for reclassifying the condiment to fit guidelines for federally funded school lunch programs (Brinkley, 1998 Hacsi, 2002). From the years 1981 to 1993, the Republican Party conservative agenda did little to redistribute resources to benefit the poor and mostly minority community.



Harkening back to television westerns, with the cowboy on his white horse, Reagan's charge was to restore traditional American values. The presumed lack of competitiveness of the American worker as believed proved by the National Commission on Excellence in Education 1983 report, the Nation at Risk catapulted education to the top of Reagan's agenda. Hacsi, 2002 reported that the impact of a Nation at Risk was that it changed the conversation concerning public education in America from equity, as defined in Brown, to concerns of global competitiveness and excellence of American schools. The report highlighted flaws in public education finding that 13 percent of the nation's 17-year olds were functionally illiterate; that college admissions scores had dropped; and entering college students were in need of an array of remedial courses (U.S. Department of Education, 2008). However, the conversation spoke of the nation's children as a group intimating that the achievement gap along ethnic lines was not the issue but that the education of the group, as a whole, was subpar and in need of improvement. The report substantiated and illuminated that equity in education as a goal of school reform represented a formidable threat to traditional American values and that Johnson's children were reaching parity during the 1980s, (Kozol, 1991). However, the achievement gap worsened on all measures during the 1990s (Harris & Herington, 2006).

Bracey, 2008 claimed that the findings in *A Nation at Risk* were biased and manipulated, speculating that the evidence was tampered with to aid politicians in persuading the public that an abysmal future lay ahead if something wasn't done to improve the plight of the American student and hence the American worker. Curtler, 2006, the legacy of *A Nation at Risk* was the call to use standardized test frequently to measure the state of America's educational system. Those tests were a part of a nation-wide effort to assess teachers, administrators, and the



curriculum. The National Center for Fair and Open Testing estimated that American elementary and high school age children took more than 100 million standardized tests yearly with the majority of those tests intelligence or college admissions test (deMarrais & LeCompte, 2003). The fact that America was not testing to its stated purpose of assessing curriculum and teacher effectiveness was second only to the fact that the standardized testing movement identified academic subjects and school districts that needed improvement, but did little to funnel resources and support to those problem areas (Lawrence III, 2006). Instead, standardized test were used as a shaming tool to further discredit some public schools and a cutoff measure for others denied college admission (Kozol, 2008). As stated earlier, such tests were culturally biased. Critical race theory believed that standardized test measured distance from the norm and those tests were reflective of the majority culture (Kozol, 2008). Half of the test takers would be above and below this moving target with African American and other minorities disproportionately represented at the bottom.

A Nation at Risk called for a highly skilled secondary school graduate as the benchmark for American public schools. The problem the report identified was well-defined and received high visibility and strong political support (Portz, 1996). The resolution that the public received was graduation reforms in the development of content standards, standardized testing and a call for a longer school year (Harris & Herington, 2006). The fact that the United States had never fulfilled those educational goals were immaterial (Belfield & Levin, 2007). The result of *A Nation at Risk* was that technical competency as measured by proficiency on standardized test restricted the scope of teaching to specific curricular and testing materials (US Department of Education, 2008).



Where Johnson's administration addressed the basic needs of the poor and the early academic preparation of those students, Reagan's administration focused on the nation's inability to compete globally. In addition, the Reagan era began the re-segregation of public and higher education institutions with the courts dismantling the mandates of the *Brown* decision (Kozol, 2005; Ladson-Billings & Tate, 1995; Peterson, 2006).

The ideology of White privilege served as a way for the majority to legitimize why some people were considered subordinate and thus allowed for their mistreatment as a course of "normal." The division of labor at work and hence society, were reproduced within the schools. The Reagan era was a continuation and reinforcement of that order. What accounted for public schooling was very different in the type, function, finance and intention, and served entirely different roles for the poor and wealthy. Both types of schools were needed for our nation's governance; however, the wealthy children were given the imaginative range to mobilize ideas for economic growth. Poor children were trained to be governed and to do the narrow tasks that the wealthy group would later prescribe. (Kozol, 2005). Stated differently, Anyon, 1981, argued that there was a different education for those who would grow to adulthood as the planners and managers and those who would be responsible for carrying out the policy and plans of others. In this way, White privilege reduced the danger of possibly disturbing introspection; and enabled White parents to give their children the uncontaminated satisfaction in their victories. White people learned to shut from their mind the possibility that they were winners in an unfair race, rarely thinking about the losers (Kozol, 2005). In this respect, the consequences of unequal education have a terrible finality. Children were only children once.



Critics of government sponsored national preschool programs argue that the High Scope Perry Preschool program and by extension, the Head Start program, which has had similar results, had not been replicated and therefore the results were not confirmed (Hacsi, 2002; Rothstein, 2004). They noted that the early IQ gains of the children in those programs disappeared by age ten, and therefore the success of the children in adult life were predicated on the development of non-cognitive or soft skills (Heckman, 2011; Peterson, 2006). Nobel Prize winning economist James Heckman argued that racial gaps in achievement were primarily due to gaps in skills perpetuated within the family and emerged early before children entered school (Rothstein, 2004). He believed that educational reform relied too much on schools and adolescent remediation strategies for problems that started in the preschool years (Heckman, 2011).

The finding that IQ tests did not adequately capture the effects of preschool on cognitive human capital suggested that economists risk serious errors if they did not account for the complexities of cognitive abilities (Barnett, 1992). Furthermore, Barnett noted that it would be ill advised to assume that the contributions of the school or family to cognitive human capital could be precisely described by the term intelligence or ability or adequately measured by whatever test scores happen to be available (Barnett, 1992). The academic achievement shrouded in student, family and cultural deficit theories with proposed competency remedies reflected a terrible pessimism about the power of teachers, schools and children, especially since those values acquired through tacit lessons were less recognizable and available to the individual's consciousness than other forms of knowledge (Lawrence III, 2006).



## **Segregation Defeats School Reform Efforts**

Research showed that a high minority composition within the schools had a tendency to impede the academic progress of African American students, while having little impact on the progress of White or Hispanic students (Peterson, 2006). A nationally representative sample of over 20,000 children entering kindergarten indicated that public schools were still very segregated. In 1998, longitudinal data from the Early Childhood Study found that in 35 percent of the schools, the children were homogeneously White. Typically, White students attend school with a diversity ratio of 6 percent Black and 5 percent Hispanic. In contrast, 59 percent of African American students attend schools with majority Black and Hispanic peers (Peterson, 2006).

Hanushek, Kain, and Rivkin explained the academic achievement gap between Blacks and Whites in terms of the concentration of Blackness within segregated schools. Furthermore, they found no single case where desegregation led to a large reduction in the achievement gap. Instead they proposed that segregation lowered Black achievement not because of White absence but because of Black concentration, that desegregating schools was not the solution in itself, but more of a tool to achieve the right racial mix. Their analysis was based on achievement test scores from third to seventh grade students in Texas from 1993-97. Their key findings were that an increase of 1 percent in Black classmates decreased Black achievement by .0025 standard deviations each year. Extrapolating from this conclusion, they surmised that Black students who experienced a decrease of 40 percent Black classmates (e.g. who go from an 80 percent Black school to a 40 percent Black school) and remained in that school for 5 years would gain one-half a standard deviation in their test scores – or a reduction in the achievement gap by more than



one-half. This ethnicity mixture in the time span of 10 years would eliminate the achievement gap by ethnicity.

Hanushek, Kain, and Rivkin did not address the probability that African Americans attending ethnically mixed schools would occur only through integration efforts. Or through new housing policies in this integration they would potentially move to schools better funded with more financial resources. Furthermore, in higher education, prior to desegregation, 90 percent of all African American degree-holders had been educated at a Historically Black College or University (HBCU) and accounted for less than one percent of entering first-year students at Predominately-White Institutions (PWI). The success of HBCU's in graduating large numbers of African Americans and more recently, the creation of the "Harlem's Children Zone" in New York by Dr. Geoffrey Canada have found success in educating and graduating predominately African American students in segregated environments (Canada, 2011). Those achievements were contrary to Hanushek's concentration of Blackness theory. So it must be acknowledged that something other than a concentration of Blackness hindered African American progression in academia.

Further analysis by Harper, Patton, and Wooden, 2009, found that by 2004, there was a reversal in higher education attendance patterns of African American college students with 88.1 percent enrolled in a PWI, decreasing the concentration of Blackness effect. This reversal can be directly attributed to the Higher Education Act, 1963 making higher education affordable through low interest grants to individuals, increased institutional aid, and threat of loss of funding for discriminatory practices toward minorities which had the effect of increasing minority representation at institutions that had predominately served a White clientele. Harper's



research support Hanushek, Kain and Rivkin's contention that integration alone did not decrease the academic achievement gap between Blacks and Whites. However where they differed was that Harper did not believe that maintaining a minority African American ethnic mixture within the school population hypothesis was valid. As with Wayne State University, African Americans consist of roughly 20 percent of the undergraduate population; yet, as the data confirm, they were not graduating at levels expected for their enrollment numbers.

#### **College Academic Achievement Gap Explanation**

Stage and Manning (1992) point out that the lack of degree attainment by African Americans may be attributed to six assumptions underlying the manner in which colleges and universities work with students and appear to be based on color-blind attitudes:

- Students of color were expected to adjust to the college environment, which was almost always White and Eurocentric in structure.
- 2. The expectation was that non-White faculty, staff, or students would be responsible for any initiative to address non-White cultural issues.
- 3. Students of color were assumed to have interests that were similar to White students.
- 4. When students of color failed to take part in academic support programs provided for them by the university, they were viewed as ungrateful and lazy.
- 5. That all students were provided equitable educational opportunities by colleges and universities.



 The dominant White culture through which the university environment functioned was working well and required no adjustment. (as cited in Reason & Evans, 2007).

Other measures that colleges and cities employed as noted in Critical Race Theory was to place an African American or other minority person in control of an essentially apartheid system – whether that system was a city or its welfare apparatus or its public schools. This practice served at least three functions. One, the symbolism protected Whites against the charges of racism. Outwardly, it gave the impression of collaboration and inclusivity. Two, the reality was that it provided a scapegoat mechanism. If the program, school or city under minority leadership failed, the official in charge was viewed as the problem; such was the case with Detroit Public School Emergency Financial Manager, Robert Bobb. Third, there was an expectation that a minority official could enforce and be even more severe in putting down unrest than White officials, consistent with the use of Black overseers during American slavery.

Contributing to African American decline in achieving parity with Whites in education, Hanushek and Rivkin, 2006 found that African American students were more likely assigned to special education curriculum, not promoted to the next grade level and exempt from taking high stake tests. This special education classification, skewed more dramatically toward African American boys than girls, had the affect of tracking African Americans prematurely out of the educational mainstream, making them more likely to be able to quit school legally before they even begin high school. Hanushek and Rivkin's findings support Anyon's claim of a dual educational system. Hanushek & Rivkin, 2006, further noted that the differences in measured skills between Blacks and Whites were enormous. By age 17, the average Black student was



performing at around the 20<sup>th</sup> percentile of the White distribution (Haycock, 2007). This performance fed directly into further schooling and into the labor market, continuing the cycle of inequality. Mincy, 2006 collaborated this finding. Across the nation, African Americans were absent or marginalized throughout the educational pipeline beginning in elementary and continuing through secondary school and beyond. Peterson, 2006 concurred that African American children were likely to be poorly prepared for first grade, let alone for college by the end of high school, especially those in large metropolitan areas such as Detroit.

#### **Generational Consequences of Uneducated Black Men**

In light of the research, what happened educationally to the African American male predicted what happened to his children. For men without a high school diploma or GED, 44 percent were unemployed year round in 2002. The manifestation of the lower educational achievement was health and incarceration statistics as well as losses of tax revenue and an increase in dependence on public assistance (Levin & Belfield, 2007, Tinto, 2004). Because the less educated, young African American man had been the hardest to absorb into the labor market, they experienced the poorest outcomes with 82.9 percent earning no more than the median hourly income of all 16-24 year old men. At the same time, there was a decline in the number of African American males in the labor market and an increase of African American men incarcerated (Mincy, 2006). For African American men, dropping out of high school has become synonymous with a one-way ticket to prison (Pluvose, 2006). In 1970, the U.S. Senate formed a Committee on Equal Educational Opportunity to examine the cost of an inadequate education. They found that the negative effects of men 25 – 34 years old who had not earned a



minimum of a high school diploma by 1970 cost the taxpayer \$237 billion in lifetime income in 1970 dollars or \$1.2 trillion in 2004 dollars (Belfield & Levin, 2007).

Research showed that educational attainment immediately reduced a host of social ills affecting a child's life chances. Those benefits included reduced unemployment levels, increased marketability in the labor market, higher income earnings over a lifetime, better health status, less criminal activity and illicit drug use, less victimization within the community, less dependence on social programs and parenting fewer children outside of wedlock (Belfield & Levin, 2007). Yet, African American men enrolled and graduated from college in fewer numbers (Slater, 1994). The significance of this enrollment trend was the impact those men had on the larger society, especially living in large metropolitan statistical areas. They were likely to have weak or nonexistent relationships with their children, which created intergenerational consequences. Those consequences included a tendency to see more children from poor, single, female-headed households, homelessness, latch key children without supervision, increased crime in the community leading to greater opportunity for victimization, and more ex-offenders living in the area. As fathers, those men were the nexus for a host of social problems (Mincy, 2006).

Although African American women live in the same communities with the same negative factors as African American men, their college enrollment and graduation rate varied drastically. Data from the U.S. Department of Education showed that African American women enrolled in college at rates almost double that of African American men and that that disparity had grown by 78 percent since 1980 (Slater, 1994). In a more recent study, Harper (2007) the National Black Male College Achievement Study, used qualitative research, identified and interviewed 219



undergraduate African American men enrolled in 42 colleges and universities in twenty states during 2005 and 2006. Harper found that 67.7 percent of African American males who enrolled in college never completed their degree. In addition, African American men had the worst college attrition rates among any other college subgroup, and that they were enrolled in American colleges at a rate of 4.3 percent, which was the same as in 1976 (Roach, 2007). A 2016 study from the National Center of Education Statistics, reported that African American women were now the most educated group across race and gender making them the most educated demographic in the country. Slater hypothesized that the cause for this disparity was due to African American men experiencing a more intense form of discrimination than any other subset of the population. Moreover, this intense discrimination systematically targeted and eliminated African American men from environments that promoted academic achievement (Slater, 1994).

# **Institutional Leadership**

"A fish stinks from the head," was a quote used to convey that the root of an organization or institution's problems could be traced to its leadership. Yet, in examination of Cyclical theory, changes from liberal to conservative policies and politics have not dislodged the persistent marginalization of African Americans as a group in society and academia. The working assumption was that a good education would lead to a good job irrelevant to the reality that societal discrimination by gender and ethnicity prohibits equality in the job market (deMarrais & LeCompte, 1999).

The pervasive effects of systematic and institutionalized racism have continued to have far-reaching implications that public policy has not been able to eradicate. Derrick Bell, an



originator of Critical Race Theory, posited that the pursuit of equity in education irrevocably weakened the foundation of the American caste system with the ramifications affecting social, economic and governmental outcomes favoring White privilege that many affluent Americans did not want to lose. Furthermore, it was the connection between White privilege and the objectification of enslaved African peoples as property that our government was constructed. The role of government has been and continues to be to protect the rights of property owners with little incentive to secure human rights for African Americans (Ladson-Billings & Tate, 1995).



#### **CHAPTER 3. METHODOLOGY**

The purpose of this study was to identify possible barriers as well as possible ways to support student retention through graduation of African Americans at Wayne State University. Differences in prior academic preparation by ethnic groups using descriptive and inferential statistics was the method used to ascertain first, if differences existed, and second, if those differences predicted the college graduation gap. This research provided empirical data that university administrators, policy makers, and local and state government officials could use to understand how African American students progressed through college, and make decisions about what could be done to bring parity to their outcome.

This eight-year retrospective analysis of first time student enrollment by ethnicity and cohort from fall 2002 through 2009 was disaggregated by WSU gateway programs also referred to as treatment programs. Those programs were selected for evaluation due to their high enrollment of members in the three distinctive ethnic groups in this study, African American Latino and White, students. The treatment programs were: Chicano Boricua Studies (CBS), Division of Community Education (DCE), Honors, Math Corps, TRiO Student Support Services, and Urban Scholars Leaders. For this research, treatment was defined as a uniform experience incoming students were exposed to as a cohort. The treatment ranged from enrollment in a specific course, seminars, workshops, fieldtrips, summer residential component, counseling, tutoring and/or any combination of the fore mentioned. Appendix A references the treatment programs in detail as to their mission, clientele and services provided. Students in the study who enrolled non-attached or not associated with a gateway program were considered control group participants. An assumption of this research was that the control group participants did not



receive intervention treatment that the various gateway programs advocated in their mission and operations statements.

Of the 16,344 lines of historical data provided by Wayne State University, 11,207 students fit the research criteria that made up the dataset used in the analysis for this research. The criteria used to select participants were: identification as African American, Latino or White ethnicity, identification as male or female, US Citizenship or Permanent Resident, an ACT Composite score, and enrolled at least one semester at WSU. Each treatment program had a unique admission code assigned to each student as they enrolled. Students not enrolled in a treatment program, or non-attached, constituted this research's control group. Full-time student statuses were defined in this study as 12 credit hours per term. This was the full-time student definition determined by federal Pell standards and financial aid.

#### **Research Design**

This quantitative study, examined the relationship between ethnicity and academic variables through nine questions to determine if or how college achievement were impacted. Treatment enrollment, community socioeconomic status, prior academic performance, retention and graduation rates were analyzed. The results were reported by – all WSU students, WSU graduates or by WSU non-graduates. Within those groups, the results were reported by treatment program, ethnicity or gender. By eliminating variable differences in ACT scores, county of origin, and high school cumulative GPA, what remained were institutional barriers that affected African Americans disproportionately from other ethnicities.

Descriptive statistics, linear and multilevel regressions along with Analysis of Variance (ANOVA), Levene and Tukey test, and chi-square were used in this study to infer a correlation



between two or more conditions. The hypothesis tested was that ethnicity was not a factor in matriculation at Wayne State University. The significance level, or alpha level set for this research was five percent, which was standard for education and social science research (Creswell, 2005; Keppel & Wickens, 2004).

Research question 1: What pathways did African Americans use to enroll at the university as compared to Latino and White students? Specifically, were they associated with a gateway program or enrolled non-attached? This question was answered using Chi-Square and descriptive statistics displayed in a frequency table with the variables cohort, treatment programs and ethnicity.

Research question 2: Did participation in a university gateway program increase retention as measured by credits earned after two years? This question was answered using ANOVA. The treatment program was the independent variable and credits earned after two years was the dependent variable. ANOVA analysis supported with Levene and Tukey multiple comparisons, and chi-squared test to ensure validity.

Research question 3: Did county median household income, predict WSU graduation? This question was addressed using Pearson correlation coefficient, ANOVA, cross tabulation and descriptive statistics. The dependent variable was geographic location, the independent variable was ethnicity.

Research question 4: Did first year enrollment trends of African American students differ from Latino and White students? This question was answered using cross tabulation, ANOVA, Levene and Tukey statistics. The dependent variable was credits earned. The independent variable was ethnicity.



Research question 5: Was there a correlation between high school cumulative GPA and WSU graduation? This question was answered using Spearman correlation.

Research question 6: Did treatment participants vary statistically in their academic preparation for college as measured by high school GPA. The impetus for this analysis was to determine if ethnic groups progressed at the same rate with the same prior academic preparation. This question was answered using cross tabulation, ANOVA, and Levene statistics.

Research question 7: Did ACT subject scores predict college persistence after two years the same across ethnicity? Was there a correlation between university persistence and ACT subject scores for African American FTIAC's as compared to Latino and White FTIAC's? This question was answered using Moderated Regression analysis with descriptive cross tabulation tables.

Research question 8: Did students persist differently by ethnicity at the same high school cumulative GPA? This question was answered using Pearson's correlation coefficient analysis, ANOVA and descriptive statistics.

Research question 9: Was there a difference in the academic preparation of graduates by ethnicity and gender as measured by ACT Composite score and high school GPA? This question was answered using descriptive statistics, ANOVA and Tukey analysis to determine if there was a relationship between high school preparation and college graduation.

## **Data Collection**

In compliance with Wayne State University protocol, through the office of Human Investigation Committee for Behavioral Exempt Research, permission was requested and granted to move forward with this study.



Administrators from the WSU offices of Admissions, Institutional Services, Financial Aid, Federal TRiO Programs, and Records and Registration provided the data for this research. Moving forward, the term Institutional Services was used to reference all of the departments since they all contributed to data collection.

WSU stored collected data in Banner, a software management system. The secured confidential internet-based system allowed for varying levels of access based on user security clearance. Banner contained information on courses, students, faculty, staff and alumni. Information collected from the admissions application and the enrollment processes were keyed into Banner and mined by the various users as needed.

For this research, WSU Institutional Services created a Microsoft Excel file with the demographic information of students enrolled from 2002 – 2009 specified in the Data Collection Instrument Table 3.1 below. Identifiable student Banner ID's of the population were included in the file to check for duplicate lines of data. Once the duplicates were eliminated, the researcher permanently deleted the Banner ID's from the study database leaving no way for the researcher to re-establish the individual lines of data from the original database or connect to individual students. The confidentiality of the individual and their academic records were assured both while research was in progress and in the final report. Data was password protected accessible only by the researcher.

Institutional Services Data	Indicators used for
1. WSU Banner ID	Student identifier to ensure no duplicates
2. Admit Description	to identified gateway programs
3. Admit Date	Provide entry date and cohort
4. Admit Student Description	First Time Student
5. High School Name	To drill further into wealth of district
6. High School Graduation Date	To limit research to first time any college

 Table 3.1. Data Collection Instrument



Table 3.1. cont		
Institutional Services Data	Indicators used for	
7. High School Description	type of school charter, public, private	
8. ACT Composite Score	Where student places nationally	
9. ACT Math	Where student places nationally in subject	
10. ACT English	Where student places nationally in subject	
11. ACT Reading	Where student places nationally in subject	
12. ACT Science	Where student places nationally in subject	
13. High School Cumulative GPA	Level of preparedness for college	
14. Resident City	To control for samples in this research	
15. Resident State	To control for samples in this research	
16. Resident ZIP	To control for samples in this research	
17. Gender	To analyze achievement by gender	
18. Ethnic Category	To control for samples in this research	
19. Citizenship Description	To control for samples in this research	
20. WSU Math Placement Result	Correlates to ACT Math	
21. Degree Awarded	Independent variable for analysis	
22. New Undergraduate	To control for samples in this research	
23. Age at WSU Enrollment	To limit research to first time any college	
24. Term Class Standing Description WSU	freshman, sophomore, junior, senior	
25. Term Cumulative Hours Attempted	To measure progression toward graduation	
26. Term Cumulative Hours Earned	To measure progression toward graduation	
27. Term Cumulative Hours Passed	To measures non-credit courses	
28. Term Grade Point Average	To measure progression toward graduation	
29. Term Cumulative Grade Point Average	To measure progression toward graduation	
30. Term Full or Part Time Attendance	To measure progression toward graduation	

# **Data Analysis**

To test the hypothesis, data analysis using software program IBM SPSS version 23 with fifty-five distinct variables was utilized to closely examine the enrollment and demographic information provided by Wayne State University. The 16,344 lines of raw data were mined to extrapolate the research sample on which analysis was conducted. The sample parameters were:

- Students who identified as African American, Latino or White,
- Who graduated from a Michigan high school,



- as a FTIAC enrolled in 2002, 2003, 2004, 2005, 2006, 2007, 2008 and 2009.
- With an ACT Composite Score, and who were
- US citizens

The genesis of the research was to determine if WSU ethnic minorities were significantly less prepared for the rigors of college and thus their lower matriculation rates; and of those who did matriculate, were they significantly different than their White counterparts in combined high school ACT Composite score and high school GPA. Finally, a cross analysis of origin of high school county was undertaken to determine if that variable was a significant factor predicting graduation.

Table 3.2 list the variables used in this this research.

Label	Value	Measure
Case Number	None	Scale
Citizenship	{0=Not Citizen, 1= Citizen/Perm Resident}	Scale
Student Began WSU	None	Scale
2002 Cohort	{0=Not 2002, 1=2002 Cohort}	Scale
2003 Cohort	{0=Not 2003, 1=2003 Cohort}	Scale
2004 Cohort	{0=Not 2004, 1=2004 Cohort}	Scale
2005 Cohort	{0=Not 2005, 1=2005 Cohort}	Scale
2006 Cohort	{0=Not 2006, 1=2006 Cohort}	Scale
2007 Cohort	{0=Not 2007, 1=2007 Cohort}	Scale
2008 Cohort	{0=Not 2008, 1=2008 Cohort}	Scale
2009 Cohort	{0=Not 2009, 1=2009 Cohort}	Scale
Credits Earned in 1st Semester	None	Scale
Credits Earned in 2nd Semester	None	Scale
Credits Earned in 3rd Semester	None	Scale
Credits Earned in 4th Semester	None	Scale
Graduate WSU	{0=Not Grad, 1=Grad}	Scale
Not Grad	{0=WSU Grad, 1=Not WSU Grad}	Scale
Ethnicity	{2= African American, 5=Latino, 6=White}	Nominal
African American Student	{0= Not AA, 1=African American}	Scale
Latino	{0=Not Latino, 1=Latino}	Scale

Table 3.2. Variable List



Table 3.2. cont.		
Label	Value	Measure
White	{0= Not White, 1=white}	Scale
Gender	{1=Male, 2=Female}	Scale
Male	{0=Female, 1=Male}	Scale
HS GPA	None	Scale
Range 0-1.99 HS GPA	None	Scale
Range 2-2.749 HS GPA	None	Scale
Range 2.750-3.09 HS GPA	None	Scale
Range 3.1-3.99 HS GPA	None	Scale
Range 4-4.57 HS GPA	None	Scale
ACT Composite Score	None	Scale
ACT Below 16	None	Scale
Equals 16	None	Scale
Equals 17	None	Scale
Equals 18	None	Scale
Equals 19	None	Scale
Equals 20	None	Scale
Greater than 20	None	Scale
English ACT	None	Scale
Math ACT	None	Scale
Science ACT	None	Scale
Treatment Programs	{1= TRiOSSS, 2=Urban, 3=Math, 4=CBS, 5=Honors, 6=DCE}	Scale
Division of Community Education Treatment	{0=Not DCE, 1=DCE}	Scale
TRiO Student Support Services Treatment	{0=Not TRiOSSS, 1=TRiOSSS}	Scale
Math Corps Treatment	{0=Not Math Corps, 1=Math Corps}	Scale
Honors Treatment	{0=Not Honors, 1=Honors}	Scale
Chicano Boricua Studies Treatment	{0=Not CBS, 1=CBS}	Scale
No Treatment	{0=Received Treatment, 1=No Treatment}	Scale
Urban Scholars Treatment	{0=Not Urban Scholar, 1=Urban Scholar}	Scale
Geographic Location of High School	{1=Out of MI, 2=NonTri County, 3=Detroit, 4=Macomb, 5=Oakland, 6=MI County Unknown, 7=Wayne Not Detroit}	Scale
GradWSU = 1 (FILTER)	{0=Not Selected. 1=Graduate}	Nominal
Range 0-19 credits earned	{-9=Missing, 1=0-11, 2=12-15, 3=16-19}	Nominal
Range 0-40 credits	{1=0-23, 2=24-36, 3=37-40}	Nominal
Range 0-72 credits	{1=0-35, 2=36-48, 3=49-72}	Nominal
Range 0-82 credits	{1=0-47, 2=48-60, 3=61-82}	Nominal
Term	Credits grouped	Nominal



The findings of this research were presented in Chapter 4. The null hypothesis was that ethnicity was not a factor in matriculation at Wayne State University. As discussed in Chapter 2, this researcher believed that there were other factors contributing to the lack of success experienced by African American students that were not captured by prior academic preparation as measured by standardized exams or incoming cumulative high school grade point average.

## Trustworthiness

This quantitative study identified barriers at Wayne State University to the graduation and retention of African American students. The research examined the academic preparation of incoming freshmen by ethnicity, gender and geographic location of high school that provided empirical data as to whether or not the students varied significantly statistically.

The validity of the study was ensured through the use of scores reported by American College Testing – ACT to Wayne State University. This nationally accepted instrument lead to comparative analysis across institutions and the meaningful interpretation of the data.

Creswell, 2005 admonished that the lack of validity may threaten the research in that conclusions reached from the data may provide false reading about the cause and effect relationship the research was designed to answer. To avoid false readings the control and treatment groups were made similar by looking at them in terms of their ACT and high school GPA. Although those measures were considered suspect from the literature review in chapter two, it provided a way to aggregate the group for statistical purposes. In addition, using cross-tabulation analysis helped to control for confounding factors.

The WSU Research Design and Analysis Unit provided guidance in the selection of statistics used to answer stated research questions.



# **CHAPTER 4. FINDINGS**

To explain the persistent academic achievement gap between African American and White students, this chapter presented analysis used to answer nine questions specific to do students vary statistically by ethnicity and/or gender in their preparation for college and in the attainment of a college degree. The analysis reiterated the research question followed by the presentation of the data, the statistics used and the hypothesis tested.

#### **Research Question 1**

What pathways did African Americans use to enroll at the university as compared to Latino and White students? Specifically, were African American students enrolled through a gateway/treatment program or did they enroll non-attached at the same rate as Latino and White students?

Of all 4,132 African American students enrolled, 1,561 students or 37.78 percent enrolled through a gateway program. However, in looking at their rate in treatment, African American students comprised 52.26 percent of all the students who received services. The largest service provider, or treatment program for African Americans was the DCE program. Of all 421 Latino students enrolled, 221 students or 52.50 percent enrolled through a gateway program and comprised 7.40 percent of all the students who received services. The CBS program was the largest enroller of Latino students. Of all 6,654 White students enrolled during this research period, 1,205 students or 18.10 percent enrolled through a gateway program and comprised 40.34 percent of all students who received services. The Honors program was the largest service provider for White students.



Table 4.1 detailed the pathways each ethnic group used to enroll at the university. The treatment program description was provided in Appendix A. These treatment programs enrolled 26.7 percent or 2,987 students: Chicano Boricua Studies (CBS), Division of Community Education (DCE), Honors, Math Corps, TRiO Student Support Services, and Urban Scholars Leaders. The control group enrolled the largest proportion of students, 73.35 percent or 8,220 students.

Treatment Programs	African American	Latino	White	All	Percent
Control Group	2571	200	5449	8220	73.35%
CBS	26	173	10	209	1.86%
DCE	974	13	145	1132	10.10%
Honors	87	27	1003	1117	9.97%
Mathematics Corps	78	1	5	84	0.74%
TRIO SSS	379	7	42	428	3.82%
Urban Scholars	17	0	0	17	0.15%
Total	4132	421	6654	11207	100%

 Table 4.1. Descriptive – Ethnicity of Students by Treatment Program

The finding were that 4,132 students or 36.86 percent identified as African American, 421 students or 3.75 percent as Latino and 6,654 students or 59.37 percent as White. African American and Latino students enrolled at the university in treatment at higher rates than White students. Table 4.2 further disaggregated student enrollment using descriptive frequency cross tabulation for variables treatment program association, entering cohort year and ethnicity to discern this pattern.



Treatment P	Programs	Et	hnicity		Total
	-	African			
		American	Latino	White	
Control	2002	240	29	838	1107
	2003	304	29	916	1249
	2004	343	23	799	1165
	2005	409	17	730	1156
	2006	446	44	755	1245
	2007	532	34	855	1421
	2008	262	21	519	802
	2009	35	3	37	75
,	Total	2571	200	5449	8220
CBS	2002	1	18	2	21
	2003	3	19	1	23
	2004	0	40	3	43
	2005	6	27	1	34
	2006	5	22	0	27
	2007	2	28	1	31
	2008	5	18	2	25
	2009	4	1	0	5
,	Total	26	173	10	209
DCE	2002	44	0	10	54
	2003	134	2	21	157
	2004	197	4	36	237
	2005	206	2	42	250
	2006	154	4	19	177
	2007	161	0	8	169
	2008	69	1	9	79
	2009	9	0	0	9
,	Total	974	13	145	1132
Honors	2004	11	5	194	210
	2005	25	7	201	233
	2006	24	7	197	228
	2007	17	2	237	256
	2008	9	5	172	186
	2009	1	1	2	4
,	Total	87	27	1003	1117

Table 4.2. Descriptive – Treatment Program by Year and Ethnicity



Table 4.2. co	ont				
Treatment Prog	grams		thnicity		Total
		African	T at a	<b>W</b> 71. 14 -	
	2002	American	Latino	White	
Math	2002	3	0	1	4
	2003	8	0	1	9
	2004	3	0	1	4
	2005	8	1	0	9
	2006	10	0	0	10
	2007	14	0	0	14
	2008	19	0	0	19
Ŧ	2009	13	0	2	15
Tot		78	1	5	84
TRiO	2002	40	2	5	47
	2003	68	0	3	71
	2004	68	0	3	71
	2005	61	0	0	61
	2006	57	1	8	66
	2007	54	3	6	63
	2008	24	1	16	41
	2009	7	0	1	8
Tot		379	7	42	428
Urban	2006	4	0	0	4
	2007	6	0	0	6
	2008	7	0	0	7
Tot		17	0	0	17
Total	2002	328	49	856	1233
	2003	517	50	942	1509
	2004	622	72	1036	1730
	2005	715	54	974	1743
	2006	700	78	979	1757
	2007	786	67	1107	1960
	2008	395	46	718	1159
	2009	69	5	42	116
Tot	tal	4132	421	6654	11207

A Chi-Square test was performed to test the hypothesis of no association between ethnicity and treatment programs. The data were presented in Table 4.3.

H<sub>o</sub>: There was no association between ethnicity and treatment programs.



H<sub>a</sub>: There was an association between ethnicity and treatment programs.

The Chi-Square statistic of 6033.380, with 12 degrees of freedom and p < .001, this research rejected the null hypothesis of no association and concluded that there was a relationship between ethnicity and treatment participation:

$$X^{2}$$
 (12, N=11,207) = 6033.380,  $p < .001$ ,

This was significant in that it confirmed the pathways minoritized students had to the university were through deficit model treatments, which in turn may have impeded their graduation efforts.

Table 4.3. Chi-Square Tests - WSU Graduate by Treatment Program and Ethnicity

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6033.380ª	12	.000
Likelihood Ratio	3509.112	12	.000
Linear-by-Linear Association	247.860	1	.000
N of Valid Cases	11207		

a. 2 cells (9.5%) have expected count less than 5. The minimum expected count is .64.

In conclusion, the treatment programs were ethnic gateways to enrollment at Wayne State University. The DCE, TRiO, Math Corps, and Urban Scholars programs served a majority African American clientele and enrolled 35 percent of all African American students during this research period. The CBS program, which served a Latino population, enrolled 41.1 percent of all incoming Latino students. And interestingly, the Honors program, which served an overwhelmingly White clientele, enrolled 15.1 percent of all incoming White students over this research period.

Of the 8,220 students in the control group, 31.2 percent were African Americans that represented 62.22 percent of the 4,132 African American students in this study. Latinos were 2.43 percent or 47.5 percent of the 421 Latino in this study, and Whites were 66.28 percent or 81.9 percent of the 6,654 White students in this study.



# **Research Question 2**

Did participation in a university gateway program increase retention as measured by credits earned after two years? The method of analysis was a One-Way ANOVA. The hypothesis tested was whether or not treatment participants earned the same number of credits after two years.

Early intervention efforts by treatment programs enabled more participants to continue through the second year than the control group. The control group retained 57.67 percent of its 8,220 students whereas the treatment programs retained 63.74 percent of its 2,987 students. Honors retained 89.25 percent and the Urban Scholars retained 94.12 percent of their participants. Participants in these two programs also earned more credits than control group participants. Math Corps, 66.67 percent, retained students at a higher rate than the control group, however participants earned fewer credits than the control group. The hypothesis tested:

Ho: The population means of all groups were the same

Ha: The population means were not all the same.

Table 4.4 showed the descriptive statistics for this ANOVA. The mean credits earned for all programs after two years was 1.51. The average credits earned ranged from a low of 1.01 by DCE treatment to a high of 2.20 for Honors treatment. DCE treatment had the smallest variability in credits earned with a .088 standard deviation. After two years, 40.7 percent of the participants in this research did not earn credits.

The data confirmed that students in treatment programs requiring higher incoming GPAs, such as Honors, Urban Scholars and Math Corps, were retained by the university at a higher rate than treatment programs that accepted below regular admit status GPA's such as, CBS, DCE,



Table 4.4. Alto VA Creatis Lamed by Treatment Hogra					
	N	Mean	Std. Deviation		
Control	4741	1.43	.608		
TRiO	211	1.27	.569		
Urban	16	1.56	.727		
Math	56	1.29	.563		
Honors	997	2.20	.622		
DCE	513	1.01	.088		
CBS	111	1.14	.343		
Total	6645	1.51	.662		

and TRiO that served predominant ethnic minorities.

Table 4.4. ANOVA – Credits Earned by Treatment Programs

The One-Way ANOVA test yielded a p < .001 and an F-statistic of 325.665 with 6 and 6638 degrees of freedom. Because this p < .05 significance, this research rejected the null hypothesis and concluded there were differences among the means of credits earned by ethnicity. The Tukey Post Hoc Multiple Comparisons analysis confirmed that students progressed differently by treatment program. The mean differences were significant at the 0.05 levels for pairs; control by TRiO at .159, control by Honors at -.766, control by DCE at .426 and control by CBS at .299. The Levene test of homogeneity of variances suggest the comparison of variances in the groups were not equal based on the p < .001 significance level, based on this analysis, this research rejected the null hypothesis that the means of all of the programs were the same. The mean of the average credits earned were below the harmonic mean, 71.966. Since the groups were unequal in size the harmonic mean was used to reduce the chance of Type I errors.

To further examine the relationship between treatment programs and ethnicity on graduation, Table 4.5 provided the data output for the cross tabulation analysis using a contingency table. The count was the number of actual students in each program. The expected



count was the number of students who statistically would have been in treatment if a normal distribution occurred. Last, the percentage of students by ethnicity represented by each group. The control group enrolled 2,571 or 62.2 percent of African American student population, however, statistically the control group should have enrolled 3,031 students.

As stated previously, the majority of African American students came to the university non-attached. This was true for all the ethnic groups in this research. However, for those in treatment, the DCE program was the largest enroller of African American students at 23.6 percent and TRiO second with 9.2 percent. The CBS treatment was the largest enroller of Latino students at 41.1 percent followed by Honors at 6.4 percent. The Honors treatment was the largest enroller of White students at 15.1 percent followed by DCE treatment at 2.2 percent.

Based on the cross tabulation analysis, it was expected that students would be disbursed among the seven programs by ethnicity. This was not the case. It was expected that more African American students would have enrolled through the CBS, control and Honors program and fewer through DCE, Math, TRiO and Urban Scholars. For White students it was expected that fewer would have enrolled through the control and Honors program and more in the other five programs. For Latino students it was expected that more would be enrolled in every program and decreased in CBS.



					Treat	ment Pro	grams			
			Control	TRiO	Urban	Math	Honors	DCE	CBS	Total
Ethnicity	African	Count	2571	379	17	78	87	974	26	4132
	American	Expected Count	3030.7	157.8	6.3	31.0	411.8	417.4	77.1	4132.0
		% within Ethnicity	62.2%	9.2%	0.4%	1.9%	2.1%	23.6%	0.6%	100.0%
	Latino	Count	200	7	0	1	27	13	173	421
		Expected Count	308.8	16.1	.6	3.2	42.0	42.5	7.9	421.0
		% within Ethnicity	47.5%	1.7%	0.0%	0.2%	6.4%	3.1%	41.1%	100.0%
	White	Count	5449	42	0	5	1003	145	10	6654
		Expected Count	4880.5	254.1	10.1	49.9	663.2	672.1	124.1	6654.0
		% within Ethnicity	81.9%	0.6%	0.0%	0.1%	15.1%	2.2%	0.2%	100.0%
Total		Count	8220	428	17	84	1117	1132	209	11207
		Expected Count	8220.0	428.0	17.0	84.0	1117.0	1132.0	209.0	11207.0
		% within Ethnicity	73.3%	3.8%	0.2%	0.7%	10.0%	10.1%	1.9%	100.0%

 Table 4.5. Cross Tabulation – Treatment Programs by Ethnicity

Next, the variable treatment program was added to the cross tabulation analysis to ascertain where the graduates came from. Table 4.6 separated graduates by treatment and control groups. Of the 11,207 students in this research, 17 percent or 1,910 students graduated. The majority of graduates in this study came from the control group, 19.51 percent or 1,604 students. The treatment programs graduated 306 students or 10.24 percent.

The significance of this finding was that 83.98 percent of the 1,910 graduates were control group participants who received no intervention. The treatment programs graduated 16 percent of their 2,987 students who initially enrolled. The difference could be attributed to the



way those students were admitted. Control group students were regularly admitted to the university, whereas treatment participants were primarily conditionally admitted.

Tuble 4.0. Descriptive woo	Oradiates by	control and	i ioatiliont i iogiai
	Enrolled	Graduates	Percent
All Students in Research	11,207	1,910	17%
Control Participants	8,220	1,604	19.51%
Treatment Participants	2,987	306	10.24%

Table 4.6. Descriptive - WSU Graduates by Control and Treatment Program

Students in the treatment programs graduated at lower rates than their control group peers. However, further analysis showed that the treatment programs recruited and enrolled the hardest to serve students based on their different mission statements. The DCE program, the largest enroller of African American students outside of the control group, was an alternative education outreach program, accepting students that the university would generally not accept due to lower high school cumulative GPA and/or ACT Composite score. The TRiO program, the second largest enroller of African American students outside of the control group, was a federally funded program with the mandate to serve first generation, low income and/or disabled students. Their mission statements were not at odds to graduation, however the populations served did not start at the same academic preparedness level as students enrolled in the control group or other treatment programs: CBS, Honors, Urban Scholars and Math Corps.

Looking at WSU graduates, the treatment programs that served the lesser-prepared students did not graduate participants at the rate of the control group, or Honors program, however, they were more successful in graduating more students from the lower levels than those programs. Table 4.7 provided a breakdown of graduates by program.



Treatment Programs	African American	Latino	White	All
Control	172	28	1404	1604
CBS	3	12	1	16
DCE	12	0	8	20
Honors	16	4	231	251
Math Corps	9	0	1	10
TRIO SSS	5	1	3	9
Urban Scholars	0	0	0	0
Total	217	45	1648	1910

Table 4.7. Descriptive – WSU Graduates by Ethnicity and Treatment Program

Figure 1 showed the number of treatment program and control group graduates in a stacked bar chart. Each column represented the total number of graduates within a program, the column color change delineates graduates by ethnicity.

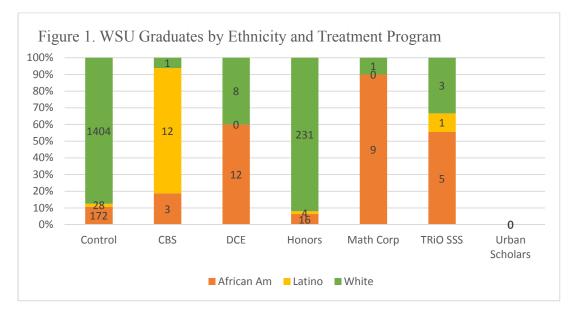


Table 4.8 compared university enrollment to the research by ethnicity, then graduates by treatment. Of the 1,910 graduates, 86.28 percent were White, 11.36 percent African American

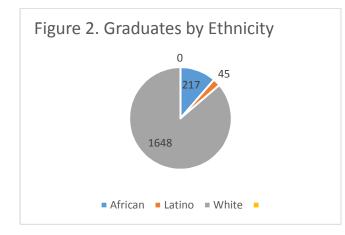


and 2.36 percent Latino. Although this research control group mirrored university enrollment with 59.37 White, 31.28 percent African American and 2.43 percent Latino, the data suggested that White students benefited from both treatment and non-treatment at Wayne State University as demonstrated by their above enrollment graduation rates, whereas African American and Latino students graduate below their enrollment rates and hence do not benefit as much.

Tuble 4.8. Comparison of Oniversity and Treatment Enronment					
	%Enrollment	%Enrollment	%Graduation		
	University	Treatment	Research		
White	48	59.37	86.28		
African American	31	31.28	11.36		
Latino	2.83	2.43	2.36		

Table 4.8. Comparison of University and Treatment Enrollment

Figure 2 depicts the raw data discussed in table 4.8 as a pie chart.



The DCE, CBS, TRiO and Math Corps programs shared characteristics in the students they served. Those programs served a majority African American population. Subset two, which included the TRiO, Math and control groups had the strongest homogeneity with a significance level of 0.654 indicated that those treatments participants earned credits at the same level. The Math treatment was included in three subsets adding similarity with the Urban Scholars



treatment in subset 3. The Honors treatment had no homogeneous peers. This program served the highest high school cumulative GPA students at the university.

#### **Research Question 3**

Did the county household median income predict WSU graduation?

There was a correlation between geographic location and persistence at WSU through the second semester. Using Pearson's correlation, r=.125, p < .001 indicated a small effect size. Next, Pearson's correlation was used to examine whether there was a relationship between geographic locations combined with ethnicity in predicting WSU graduation. Whites students who graduated from a Wayne county high school were more than six times more likely to graduate from WSU than African American students who graduated from a Wayne county high school. The ratio held for Macomb and Oakland counties. Whites students who graduated from a Macomb or Oakland county high school were more than four times more likely to graduate from WSU than African American students who graduated from a Macomb or Oakland county high school were more than four times more likely to graduate from WSU than African American students who graduated from a Macomb or Oakland county high school were more than four times more likely to graduate from WSU than African American students who graduated from a Macomb or Oakland county high school were more than four times more likely to graduate from WSU than African American students who graduated from a Macomb or Oakland county high school. For White students, geographic location was not a factor in their progression, however it was a factor in how African American students progressed through the university. Table 4.9 provided the percentage of graduates by ethnicity and county.

Location of high school	African American	Latino	White	All
Macomb County	8.93	12.50	37.68	35.00
Oakland County	8.79	13.33	37.03	28.29
Wayne County	5.31	11.46	35.22	15.19

Table 4.9. High School Location by WSU Graduates

An analysis using Pearson's correlation coefficient indicated that there was a significant linear relationship between ethnicity and graduates. In Macomb county, r=.108, p < .001 indicated a small effect size. In Oakland county, r=.197, p < .001 indicated a small effect size.



In Wayne not Detroit, r=.138, p < .001 again, indicated a small effect size. However, when Detroit was analyzed separately, r=.394, p < .001, the effect size was medium. In each geographic location, the linear relationship was significant at the p < .001 level.

The variable geographic location of high school was the proxy for income in this research. County median household income was significant in that Michigan was very ethnically segregated with 90 percent of the student body coming from those three counties – Macomb, Oakland and Wayne. Oakland County was considered a wealthier suburb with a median 2009 household income of \$65,594. Macomb County had a median household income of \$53,451 with Wayne county, median household income of \$41,184.

The majority of WSU graduates in this research, 92.98 percent or 1,776 students came Macomb, Oakland, and Wayne. Of those counties, White graduates comprised 86.6 percent, African Americans 11.10 percent and Latinos 2.31 percent. One-way ANOVA was conducted to compare the difference between the groups on the dependent variable geographical location to the independent variable ethnicity of all students enrolled. The hypothesis tested:

H<sub>o:</sub> The means of all groups were the same

H<sub>a:</sub> The means were not all the same.

Table 4.10 showed the descriptive statistics for this ANOVA. The mean graduates by geographic location for all African American students enrolled during this research period were 3.72. The mean graduates for all Latino students enrolled were 4.59. The mean graduates for all White students enrolled were 5.01. African American students had the smallest variability in graduates with a 1.694 standard deviation.



The data confirmed that White students graduated at a higher rate than both Latino and African American students. Their progress was not hindered by location.

	N	Mean	Std. Deviation
African American	4132	3.72	1.694
Latino	421	4.59	2.007
White	6654	5.01	1.842
Total	11207	4.52	1.898

Table 4.10. ANOVA – WSU Graduates by HS Location

The Levene's statistical test for homogeneity of variances with a p < .001, this research rejected the null hypothesis, the means were not equal. Table 4.11 further supported that finding. The F-statistic of 654.734 with 2 and 11206 degrees of freedom and p < .001, therefore, because this *p*-value was less than 0.05, this research rejected the null. The means of the groups were not equal. This analysis supported the results from the Levene test.

Table 4.11. ANOVA - Sum of Squares WSU Graduates by Ethnicity

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4222.316	2	2111.158	654.734	.000
Within Groups	36126.735	11204	3.224		
Total	40349.050	11206			

The Tukey Post Hoc Multiple Comparisons analysis confirmed that students progressed differently by ethnicity and geographic location of high school. The mean differences were significantly different from each other at the 0.05 levels for pairs; African American by Latinos at -.870, African American and Whites at -1.287, Latino by Whites at -.417 shown in Table 4.12.



		Mean Difference (I-		
(I) Ethnicity	Tukey Ethnicity	J)	Std. Error	Sig.
African American	Latino	870*	.092	.000
	White	-1.287*	.036	.000
Latino	African American	.870*	.092	.000
	White	417*	.090	.000
White	African American	1.287*	.036	.000
	Latino	.417*	.090	.000

Table 4.12. Tukey Multiple Comparisons Post Hoc Test Location by Ethnicity

\*. The mean difference is significant at the 0.05 level.

Next the ANOVA was conducted on graduates only. Table 4.13 reported 1,910 graduates and 9,274 non-graduates. Of the graduates, White students were 86.28 percent or 1,648; African American students were 11.36 percent or 217; and Latinos were 2.36 percent or 45 students.

			Ethnicity		
		African American	Latino	White	Total
WSU	Missing Data	5	0	18	23
	Non Graduates	3910	376	4988	9274
	Graduates WSU	217	45	1648	1910
Total		4132	421	6654	11207

Table 4.13. Descriptive – WSU Graduates by Ethnicity

Table 4.14 showed the descriptive statistics for this ANOVA. Given the significant Levene's test result, p = .597, the homogeneity of variance assumption was violated. Results showed that there was a significant effect of independent variable on the dependent variable, F(2,1907) = 19.937, p = .000.



		Counties – Geographic Location of High Schools							
	Missing	Not	Non Tri-				MI County Not	Wayne Not	
Ethnicity	Data	MI	County	Detroit	Macomb	Oakland	Known	Detroit	Total
African American	5	0	12	120	10	37	3	30	217
Latino	0	0	3	20	4	4	1	13	45
White	19	1	86	218	517	367	4	436	1648
Total	24	1	101	358	531	408	8	479	1910

Table 4.14. Cross Tabulation – WSU Graduates by Geographic Location and Ethnicity

The Honors programs drew students from Macomb, Oakland and Wayne Not Detroit communities. The DCE program, the largest enroller of African American students drew the majority of its enrollment from the city of Detroit and Oakland counties.

Table 4.15 distinguished that the control group enrolled students disbursed throughout the geographic areas in this research. TRiO SSS, Math Corps and CBS drew graduates overwhelmingly from the city of Detroit.



				Geogr	aphic Lo	cation of H	ligh Schoo	ol		
Treatment Programs		Missing	Not MI	Non Tri- County	Detroit	Macomb	Oakland	Michigan County Unknown	Wayne Not Detroit	Total
African	Control	5	0	9	99	8	24	1	27	173
American	TRiO	0	0	0	4	0	0	1	0	5
	Math	0	0	0	8	0	0	0	0	8
	Honors	0	0	3	5	2	5	0	1	16
	DCE	0	0	0	4	0	7	1	0	12
	CBS	0	0	0	0	0	1	0	2	3
	Total	5		12	120	10	37	3	30	217
Latino	Control	0	0	2	13	2	3	0	8	28
	TRiO	0	0	0	1	0	0	0	0	1
	Honors	0	0	0	0	1	1	0	2	4
	CBS	0	0	1	6	1	0	1	3	12
	Total	0	0	3	20	4	4	1	13	45
White	Control	19	1	68	213	435	309	4	355	1404
	TRiO	0	0	1	1	0	1	0	0	3
	Math	0	0	0	1	0	0	0	0	1
	Honors	0	0	17	0	82	53	0	79	231
	DCE	0	0	0	3	0	4	0	1	8
	CBS	0	0	0	0	0	0	0	1	1
	Total	19	1	86	218	517	367	4	436	1648
Graduate Totals	Control	24	1	79	325	445	336	5	390	1605
	TRiO	0	0	1	6	0	1	1	0	9
	Math	0	0	0	9	0	0	0	0	9
	Honors	0	0	20	5	85	59	0	82	251
	DCE	0	0	0	7	0	11	1	1	20
	CBS	0	0	1	6	1	1	1	6	16
	Total	24	1	101	358	531	408	8	479	1910

Table 4.15. Cross tabulation - WSU Graduates by Ethnicity, Treatment, Geographic Location

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			Geographic Location of High School							
								Michigan	Wayne	
				Non Tri-				County	Not	
Ethnicity		Missing	Not MI	County	Detroit	Macomb	Oakland	Unknown	Detroit	Total
African	Control	13	0	250	1610	90	256	9	343	2571
American	TRiO	2	0	10	285	11	32	2	37	379
	Urban	0	0	0	14	0	0	0	3	17
	Math	0	0	0	68	1	5	0	4	78
	Honors	0	0	11	35	11	16	0	14	87
	DCE	0	0	57	538	9	149	75	146	974
	CBS	0	0	0	21	0	2	1	2	26
	Total	15	0	328	2571	122	460	87	549	4132
Latino	Control	1	0	17	61	19	21	0	81	200
	TRiO	0	0	1	3	1	1	0	1	7
	Math	0	0	0	1	0	0	0	0	1
	Honors	0	0	2	3	5	2	0	15	27
	DCE	0	0	0	4	0	0	0	9	13
	CBS	0	0	7	99	11	10	2	44	173
	Total	1	0	27	171	36	34	2	150	421
White	Control	26	1	336	508	1538	1107	16	1917	5449
	TRiO	0	0	9	5	7	8	0	13	42
	Math	0	0	0	4	0	1	0	0	5
	Honors	0	0	81	24	332	189	1	376	1003
	DCE	0	0	7	9	19	54	5	51	145
	CBS	0	0	0	4	1	2	0	3	10
	Total	26	1	433	554	1897	1361	22	2360	6654
Total	Control	40	1	603	2179	1647	1384	25	2341	8220
	TRiO	2	0	20	293	19	41	2	51	428
	2	0	0	0	14	0	0	0	3	17
	Math	0	0	0	73	1	6	0	4	84
	Honors	0	0	94	62	348	207	1	405	1117
	DCE	0	0	64	551	28	203	80	206	1132
	CBS	0	0	7	124	12	14	3	49	209
	Total	42	1	788	3296	2055	1855	111	3059	11207

Table 4.16. Cross tabulation - WSU Non-Graduate \* Ethnicity, Treatment, Geographic Location



When the filter of graduates was removed from the analysis and non-graduates examined, the geographic distribution patterns were duplicated as seen above, in Table 4.16. Again, TRiO SSS, Math Corps and CBS drew from the city of Detroit. The Honors programs drew students from Macomb, Oakland and Wayne Not Detroit. The DCE program drew the majority of its enrollment from the city of Detroit, Oakland and Wayne Not Detroit counties.

#### **Research Question 4**

Did first year enrollment trends of African American students differ from Latino and White students?

After one year of study, all of ethnic groups progressed below full-time status. African American men were less than full time 88.30 percent and African American females 86.44 percent. Latino males and females were over-represented in the less than full-time categories at the rate of 77.14 percent and 77.37 percent with males doing slightly better than their female counterparts. White students earned less than full-time status 57.07 percent for males and 52.19 percent for females.

One-way ANOVA was conducted to compare the difference between the ethnic groups on the dependent variable, credits earned after one year. The hypothesis tested was that ethnic groups earned credits equally after one year.

H<sub>o:</sub> The means of all groups were the same

H<sub>a:</sub> The means were not all the same.

Given the significant Levene's test result, p < .001, the null hypothesis was rejected, the means were not equal. F(2,1359) = 13.130, p < .001. Tukey's Post Hoc tests showed that African American students had (M = 1.29, SD = .455), p = .036 was lower than Latino students (M =



1.36, SD = .490), p = .098. White students (M = 1.47, SD = .506) were higher than both African American and Latino students.

This question differed from data provided for research question two in that this question analyzed retention after one year versus the other question examined progress after two years. This hypothesis tested whether earlier intervention made a difference from enrollment to the end of year one.

Next, credits earned by treatment programs was analyzed due to the strong association that ethnic group enrollment had to treatment programs. The results of the analysis were presented in Table 4.17. The mean credits earned after one year was 12.87 credits, compared to the 1.51 credits earned after two years or four semesters discussed in question two. The average credits earned after one year ranged from a low of 5.92 credits earned by DCE students to a high of 26.55 credits earned by Honor students. The Honor students also had the smallest variability in credits earned with standard deviations of 6.45. The control group had the largest standard deviation of 13.14.

	N	Mean	Std. Deviation	Std. Error
Control	8220	11.98	13.174	.145
TRiO	428	13.35	12.956	.626
Urban	17	24.94	7.352	1.783
Math	84	15.98	11.034	1.204
Honors	1117	26.55	6.455	.193
DCE	1132	5.92	9.578	.285
CBS	209	8.89	11.839	.819
Total	11207	12.87	13.243	.125

Table 4.17. ANOVA – Credits Earned 2<sup>nd</sup> Semester



However, early intervention made a difference for treatment participants in TRiO, Urban Scholars, Math Corps and Honors treatment. In each of those programs, the participants earned more credits after one year than the control group students. This suggested that intervention for minority-focused treatments did indeed help with retention. The null hypothesis was rejected because the means were not equal. Treatment programs progressed at a higher rate than the control group. The Levene's test result, p < .001, confirmed that the null hypothesis should be rejected, the means were not equal. F(6,11200) = 192.073, p < .001. The treatment participants earned credits after one year at higher rates than the control group. The DCE and CBS programs earned credits below the control group after one year.

The mean square between and within groups differed; therefore the null hypothesis that students progressed at the same rate between treatment programs was rejected. ANOVA Table 4.18 produced a large mean square for the between groups, that further confirmed that the groups were not progressing at the same rate. Again, this difference was in favor of TRiO, Urban Scholars, Math Corps and Honors treatment programs with participants progressing at higher rates than their control counterparts.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	276846.876	6	46141.146	306.075	0.000
Within Groups	1688413.226	11200	150.751		
Total	1965260.102	11206			

Table 4.18. ANOVA Table – Credits Earned Second Semester

The Tukey Post Hoc Multiple Comparisons analysis confirmed that students progressed differently by treatment program. The mean differences were significantly different from each other at the 0.05 levels for pairs; control by Urban at -12.959, control and Math at -3.994, control



by Honors at -14.568, control by DCE at 6.059 and control by CBS at 3.088. TRiO and the control participants were earning credits statistically at the same rate – less than Urban, Honors and Math but higher than CBS and DCE. The average credits earned were below the harmonic mean 60.214.

#### **Research Question 5**

Was there a correlation between high school cumulative GPA and WSU graduation?

High school cumulative grade point average was not a precise predictor of future WSU graduation. Using the Spearman correlation coefficient with a significance level, p = .05, there was no relationship between high school cumulative GPA's between 2.750 – 4.57 on degree attainment at WSU. Below 2.750 there was a negative relationship with rho =-.040 with p = .081. Therefore this research rejected the null hypothesis.

H<sub>o:</sub> There was no relationship between the two variables

H<sub>a:</sub> There was a relationship between the two variables.

The statistics for Spearman's rho:

- 1. For high school cumulative GPA range 2.75 3.09 rho =-.056 with p = .015, therefore this research failed to reject the null, there was no relationship between high school cumulative GPA and WSU graduation.
- 2. For high school cumulative GPA range 3.1 3.99 rho =-.224 with p < .001, this research failed to reject the null, there was no relationship between high school cumulative GPA and WSU graduation.



3. For high school cumulative GPA range 4.0 - 4.57 rho =-.053 with p = .021, therefore this research failed to reject the null, there was no relationship between high school cumulative GPA and WSU graduation.

An analysis of graduates by gender yielded the same results. The frequency distribution, Table 4.19, overwhelmingly supported that of the 1,910 graduates, 91.2 percent fell in the regular admit category of high school cumulative GPA's of 2.750 and higher. This trend held for men, 87.64 percent as well as women, 93.53 percent. Conversely, graduates below regular admit status, less than 2.750 high school GPA, were 12.36 percent for men and 6.4 percent for women.

	Gender		
HS GPA Range	Male	Female	Total
0-1.99	17	26	43
2-2.749	74	50	124
2.750-3.09	95	132	227
3.1-3.99	489	821	1310
4-4.57	61	145	206
Total	736	1174	1910

Table 4.19. WSU Graduate by HS GPA and Gender

In conclusion, Table 4.20 showed the probability of earning a degree at WSU with a high school cumulative GPA above 2.750 was not enhanced. Students matriculating to WSU with high school cumulative GPA's above 2.750 were just as likely to graduate as not graduate. However, a high school cumulative GPA below 2.750, had a negative relationship, increasing the odds that those students would be less likely to earn a WSU degree.



HS GPA Range	Graduates	Non- Graduates	All		
0-1.99	43	519	562		
2.0 - 2.749	124	2118	2242		
2.750 - 3.09	227	2118	2345		
3.1 - 3.99	1310	4290	5600		
4.0 - 4.57	206	252	458		
Total	1910	9297	11207		

Table 4.20. WSU Graduates and Non-Graduates by HS GPA

## **Research Question 6**

Did treatment participants vary statistically in their academic preparation for college as measured by incoming cumulative high school GPA? Participants in treatment programs varied widely in their prior academic preparation.

Table 4.21 showed the descriptive statistices of the mean cumulative high school GPA for treatment program participants. The hypothesis tested was that all means were equal:

H<sub>o</sub>: the means of all groups were the same

H<sub>a</sub>: the means of all groups were not the same.

The mean high school cumulative GPA for entering WSU students in this research was 3.16 which was above the regular admit threshold for WSU. Students in the DCE treatment program had the lowest mean high school GPA of 2.27, followed by TRiO treatment students with a 2.61, and CBS treatment students with a 2.91 entering high school cumulative GPA. Honor students had the highest incoming GPA of 3.82 followed by Urban Scholars with 3.25 and Mathematics Corps with 3.13 average high school GPA. The treatment programs with the smallest enrollment also had the smallest variability in GPAs with a standard deviation of .280 for Urban Scholars and .466 for Math Corps.



	N	Mean	Std. Deviation	Std. Error
Control	7981	3.22634	.457780	.005124
TRiO	405	2.61635	.455502	.022634
Urban	17	3.25176	.280407	.068009
Math	84	3.13003	.466450	.050894
Honors	1102	3.81920	.200473	.006039
DCE	1076	2.27504	.312700	.009533
CBS	195	2.91992	.490395	.035118
Total	10860	3.16329	.564404	.005416

Table 4.21. Descriptive - Effects of HS GPA on Treatments

The Levene's statistical test for homogeneity of variances with a p < .001, this research rejected the null hypothesis, the means were not equal. Table 4.22 further supported that finding. The F-statistic of 1364.973 with 6 and 10853 degrees of freedom and p < .001, therefore, because this *p*-value was less than 0.05, this research rejected the null. The treatment program means were not equal. This analysis supported the results from the Levene test.

Table 4.22. ANOVA –	Treatments by High	h School Cumulative	e GPA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1487.697	6	247.949	1364.973	.000
Within Groups	1971.463	10853	.182		
Total	53206.763	10859			

Next, an ANOVA of the effects of high school GPA ranges by treatment programs with results shown in Table 4.23.



		Sum of Squares	df	Mean Square	F	Sig.
Range 0-1.99 HS GPA	Between Groups	36.521	6	6.087	137.087	.000
	Within Groups	497.296	11200	.044		
	Total	533.817	11206			
Range 2-2.749 HS GPA	Between Groups	537.008	6	89.501	797.801	.000
	Within Groups	1256.472	11200	.112		
	Total	1793.480	11206			
Range 2.750-3.09 HS	Between Groups	117.947	6	19.658	126.798	.000
GPA	Within Groups	1736.375	11200	.155		
	Total	1854.322	11206			
Range 3.1-3.99 HS GPA	Between Groups	437.143	6	72.857	345.089	.000
	Within Groups	2364.606	11200	.211		
	Total	2801.749	11206			
Range 4-4.57 HS GPA	Between Groups	36.276	6	6.046	168.026	.000
	Within Groups	403.007	11200	.036		
	Total	439.283	11206			

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Table 4.23. ANOVA Table - Treatment Programs by High School GPA Range

- 1. Less than 2.00 HS cumulative GPA report an F-statistic of 137.087 with 6 and 11200 degrees of freedom and p < .001. If the null hypothesis were true the between-groups and within-groups mean square would be close to 1. Since the F-statistic was large, this research rejected the null hypothesis. The means were not equal, treatment participants varied in their academic preparation for college at this high school cumulative GPA.
- 2. At 2.0 to 2.749 HS Cumulative GPA report an F-statistic of 797.801 with 2 and 11200 degrees of freedom and p < .001. If the null hypothesis were true the between-groups and within-groups mean square would be close to 1. Since the F-statistic was large, this research rejected the null hypothesis. The means were not equal, treatment participants varied in their academic preparation for college at this high school cumulative GPA.
- 3. At 2.75 to 3.09 HS Cumulative GPA report an F-statistic of 126.798 with 2 and 11200 degrees of freedom and p < .001. If the null hypothesis were true the between-groups and within-groups mean square would be close to 1. Since the F-statistic was large, this



research rejected the null hypothesis. The means were not equal, treatment participants varied in their academic preparation for college at this high school cumulative GPA.

- 4. At 3.10 to 3.99 HS Cumulative GPA report an F-statistic of 345.089 with 2 and 11200 degrees of freedom and p < .001. If the null hypothesis were true the between-groups and within-groups mean square would be close to 1. Since the F-statistic was large, this research rejected the null hypothesis. The means were not equal, treatment participants varied in their academic preparation for college at this high school cumulative GPA.
- 5. At 4.0 to 4.57 HS Cumulative GPA report an F-statistic of 168.026 with 2 and 11200 degrees of freedom and p < .001. If the null hypothesis were true the between-groups and within-groups mean square would be close to 1. Since the F-statistic was large, this research rejected the null hypothesis. The means were not equal, treatment participants varied in their academic preparation for college at this high school cumulative GPA.

In conclusion, the assertion that treatment participants were the same was rejected by this research. At each high school GPA range, p < .001 the means were not equal therefore the null was rejected.

#### **Research Question 7**

Did ACT subject scores predict college persistence after two years or four semesters the same across ethnicity?

For ACT Composite: All scores (below 36), African American and Latino students progressed at below full-time status. White students progressed at below full-time status with ACT Composite scores below 20, however, progressed at full-time rate with a 21 to 36 ACT Composite score.

For ACT English: All scores (below 36), African American and Latino students progressed at below full-time status. White students progressed at below full-time status with



ACT English scores below 20, however progressed at full-time rate with a ACT English above 20 score.

For ACT Math: scores (below 25), African American and Latino students progressed at below full-time status. However, half of the African American students in the 26-36 ACT Math ranged progressed below full-time credits and the other half progressed at full-time status. White students progressed at below full-time status with ACT Composite scores below 20, however progressed at full-time rate at above 20 score.

For ACT Science: All scores (below 36), African American and Latino students progressed at below full-time status. White students progressed at below full-time status with ACT Composite scores below 20, however, progressed at full-time rate with ACT Science above 20 score.

This analysis suggest that the university admission standard of a minimum ACT Composite score for regular admission was better at predicting retention through the second year for White students and not minoritized students. ACT Composite scores were not predictive for African American and Latino students.

Cross tabulation descriptive statistics was the method of analysis for the ACT Composite, ACT English, ACT Mathematics, and ACT Science subject scores. Holding the variable credits earned after two years by each ACT scores, the data showed that persistence differed by ethnicity. African American students were over represented in the below 16 ACT scores, where White Students were over represented in the 21 and higher ACT scores. Additionally, African American students were less likely to earn full-time status credits. Of the 1,491 African American students with an ACT Composite at 20 or below, 91 percent were not progressing at



full-time status toward graduation. This number was significant in that it represents almost 20 percent of all of the African American students enrolled during this research period.

For White students with an ACT Composite at 20 or below, 75.6 percent were not progressing at full-time status toward graduation. This represented 2.6 percent of all of the White students enrolled during this research period.

This trend was present in the ACT English, ACT Math and ACT Science subject scores. White students progressed at a higher full-time status rate toward graduation than African American student with an ACT subject score at 20 or below. Not persisting at full-time status was another indicator that this population would take longer to graduate. Figure 3 showed the distribution of credits earned after two years by ACT Composite scores and ethnicity.

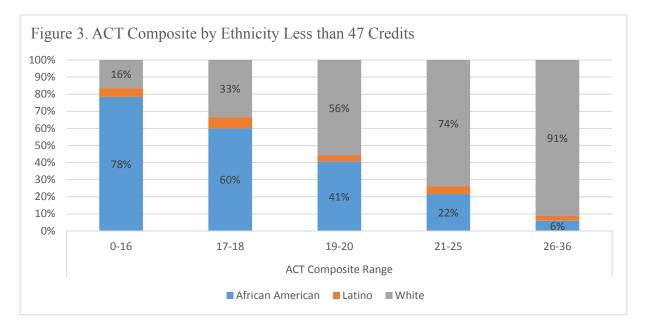


Table 4.24 provided the distribution of ACT Composite scores by ethnicity and credits earned over two years, which equated to four semesters at WSU.



-								
Ethnicity of St	Below 16	17-18	19-20	21-25	26-36	Total		
African	0-82 Credits	0-82 Credits 0-47		425	256	257	21	1769
American		48-60	39	43	50	101	23	256
		61-82	1	2	5	25	8	41
	Total		850	470	311	383	52	2066
Latino	0-82 Credits	0-47	53	46	22	52	10	183
		48-60	6	7	11	19	12	55
		61-82	1	0	1	3	0	5
	Total		60	53	34	74	22	243
White	0-82 Credits	0-47	170	236	351	879	324	1960
		48-60	48	101	219	880	549	1797
		61-82	4	14	32	236	293	579
	Total		222	351	602	1995	1166	4336
Total	0-82 Credits	0-47	1033	707	629	1188	355	3912
		48-60	93	151	280	1000	584	2108
		61-82	6	16	38	264	301	625
	Total		1132	874	947	2452	1240	6645

Table 4.24. Cross tabulation - ACT Composite by Credits Earned Fourth Term and Ethnicity

Figure 4 showed the ACT English score distribution by ethnicity after two years.

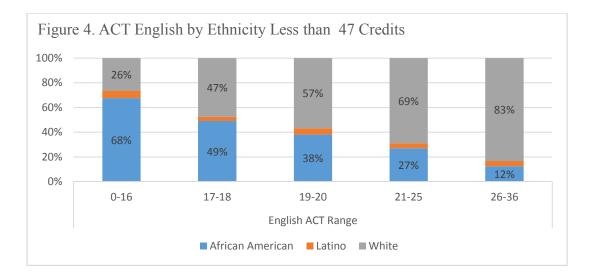




Table 4.25 provided the ACT English distribution scores by ethnicity and credits earned after two years.

Ethnicity of St	0-16	17-18	19-20	21-25	26-36	Total		
African	0-82 Credits	0-82 Credits 0-47			223	253	44	1677
American		48-60	57	28	46	88	30	249
		61-82	2	2	1	21	13	39
	Total		952	294	270	362	87	1965
Latino	0-82 Credits	0-47	80	19	30	38	15	182
		48-60	13	2	6	20	12	53
		61-82	0	1	1	2	1	5
	Total		93	22	37	60	28	240
White	0-82 Credits	0-47	348	255	332	650	294	1879
		48-60	124	134	237	743	517	1755
		61-82	23	19	38	214	265	559
	Total		495	408	607	1607	1076	4193
Total	0-82 Credits	0-47	1321	538	585	941	353	3738
		48-60	194	164	289	851	559	2057
		61-82	25	22	40	237	279	603
	Total		1540	724	914	2029	1191	6398

Table 4.25. Cross tabulation – ACT English by Credits Earned Fourth Term and Ethnicity

Figure 5 showed the ACT Math score distribution by ethnicity after two years.



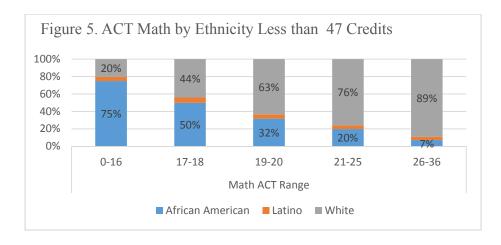


Table 4.26 gives the ACT Math distribution scores by ethnicity and credits earned.

		Math ACT Range								
Ethnicity of Student				0-16	17-18	19-20	21-25	26-36	Total	
African	0-82	Credits	4th	0-47	962	364	162	164	27	1679
American	Term			48-60	65	46	34	84	20	249
				61-82	3	4	2	23	7	39
	Total				1030	414	198	271	54	1967
Latino	0-82	Credits	4th	0-47	63	44	25	36	14	182
	Term			48-60	5	16	7	15	10	53
				61-82	1	0	1	1	2	5
	Total				69	60	33	52	26	240
White	0-82	Credits	4th	0-47	262	322	323	632	341	1880
	Term			48-60	106	203	220	662	566	1757
				61-82	11	17	47	189	296	560
	Total				379	542	590	1483	1203	4197
Total	0-82	Credits	4th	0-47	1287	730	510	832	382	3741
	Term			48-60	176	265	261	761	596	2059
				61-82	15	21	50	213	305	604
	Total				1478	1016	821	1806	1283	6404

Table 4.26. Cross tabulation – ACT Math by Credits Earned Fourth Term and Ethnicity

Figure 6 shows the ACT Science score distribution by ethnicity after two years.



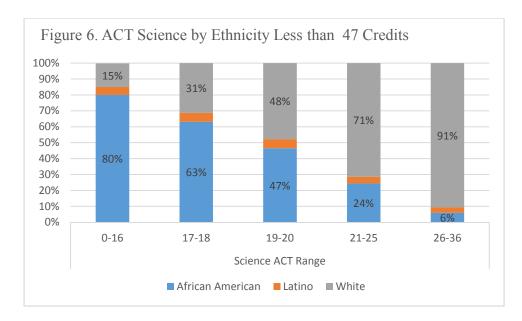


Table 4.27 gives the ACT Science distribution scores by ethnicity and credits earned.

					Science ACT Range					
Ethnicity of Student				0-16	17-18	19-20	21-25	26-36	Total	
African	0-82	Credits	4th	0-47	589	392	369	310	19	1679
American	Term			48-60	29	46	51	111	12	249
				61-82	3	1	6	24	5	39
	Total				621	439	426	445	36	1967
Latino	0-82	Credits	4th	0-47	37	35	45	54	11	182
	Term			48-60	4	4	9	30	6	53
				61-82	0	2	0	2	1	5
	Total				41	41	54	86	18	240
White	0-82	Credits	4th	0-47	109	194	379	908	291	1881
	Term			48-60	46	94	242	913	462	1757
				61-82	5	13	47	269	226	560
	Total				160	301	668	2090	979	4198
Total	0-82	Credits	4th	0-47	735	621	793	1272	321	3742
	Term			48-60	79	144	302	1054	480	2059
				61-82	8	16	53	295	232	604
	Total				822	781	1148	2621	1033	6405

Table 4.27. Cross tabulation – ACT Science by Credits Earned Fourth Term and Ethnicity



# **Research Question 8**

Did students persist differently by high school cumulative GPA and ethnicity?

Students did persist differently by high school cumulative GPA and ethnicity as measured by credits earned after two years at WSU. Table 4.28 showed the statistics performed. Using Pearson's correlation coefficient, r=.566, p < .001 showed a large and significant linear relationship between credits earned and high school GPA. For ethnicity and credits earned, r=.480, p < .001 showed a medium and significant linear relationship. For ethnicity and high school GPA, r=.423, p < .001 showed a medium and significant linear relationship.

		HS GPA	Credits4th	Ethnicity
HS GPA	Pearson Correlation	1	.566**	.423**
	Sig. (2-tailed)		.000	.000
	Ν	10860	6473	10860
Credits4th	Pearson Correlation	.566**	1	.480**
	Sig. (2-tailed)	.000		.000
	Ν	6473	6653	6653
Ethnicity	Pearson Correlation	.423**	.480**	1
	Sig. (2-tailed)	.000	.000	
	Ν	10860	6653	11207

Table 4.28. Pearson Correlation – HS GPA by Credits and Ethnicity

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 4.29 showed the frequency of the variable high school cumulative GPA of all students. However when disaggregating high school preparation by ethnicity, it was apparent that those groups came to the university differently prepared.



1 4010 4.27	Descriptive	
Ν	Valid	10860
	Missing	348
Mean		3.16329
Median		3.19000
Std. Deviation	on	.564404
Range		3.340
Minimum		1.230
Maximum		4.570

Table 4.29 Descriptive – HS GPA

Table 4.30 showed the mean statistic average high school cumulative GPA of WSU nongraduates by gender and ethnicity. Of the 3,910 African American students identified, their group GPA was 2.25. African American females had a high school GPA of 2.31 with males 2.14. Of the 376 Latino students their group GPA was 2.28. Latino females had a high school GPA of 2.31 with males 2.24. Of the 4,988 White students identified, their group GPA was 3.07. White females had a high school GPA of 3.17 with males 2.95. This analysis confirmed that non-WSU graduates had lower incoming high school cumulative GPA's than graduates. In addition, the ethnic group and gender GPA's were not equal.

Next, using descriptive analysis, persistence levels of non-graduates were analyzed by credits earned at intervals first and fourth semesters by ethnicity, gender and high school GPA. For WSU non-graduate African Americans, there was a difference of 46.90 percent of students who started in semester one and disappeared by semester four. For WSU African American graduates, there was a difference of 2.47 percent. These students were retained at over 97 percent as compared to non-graduates retained at 53.1 percent.



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Ethnicity	Gender	Mean	N	Std. Deviation
African American	Male	2.14848998	1295	2.487239795
	Female	2.30912344	2615	2.645745294
	Total	2.25592131	3910	2.595104155
Latino	Male	2.23867654	162	2.776658153
	Female	2.31385981	214	3.038347071
	Total	2.28146702	376	2.924893005
White	Male	2.95311756	2386	1.753348190
	Female	3.17116722	2602	1.680137975
	Total	3.06686359	4988	1.718830514
Total	Male	2.65186017	3843	2.112825097
	Female	2.72231650	5431	2.295518935
	Total	2.69312050	9274	2.221791811

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Table 4.30. Mean – WSU Non-Graduates by Ethnicity and HS GPA

In comparing Latino graduates and non-graduates, the enrollment patterns differed by gender. The female students lagged behind their male counterparts in credits earned; they stopped/dropped-out at higher rates; and Latina's enrolled at the university at lower rates then Latino men. Although Latinos appeared strong academically, 58.21 percent stopped/dropped-out by the fourth semester. Latino students who graduated were 82.10 percent regular admissible, and lost zero percent from semester one count to semester four.

For WSU non-graduate White students, there was a difference of 30.44 percent of students who started in semester one and disappeared by semester four. For WSU White graduates, there was a difference of 1.36 percent. These students were retained at over 98 percent as compared to their non-graduate counterparts retained at 70 percent.

The Pearson's correlation coefficient Table 4.31 detailed the 11,184 cases with high school GPA's in this research. The hypothesis tested:



Ho: no relationship between WSU Graduates, high school cumulative GPA and ethnicity

H<sub>a</sub>: there was a relationship between WSU Graduates, high school cumulative GPA and ethnicity.

		Grads	0-1.99	2-2.749	2.75-3.09	3.1-3.99	4-4.57	Af Am	Latino	White
GradWSU	Pearson Correlation	1	058**	154**	101**	.169**	.154**	240**	034**	.249**
	Sig. (2- tailed)		.000	.000	.000	.000	.000	.000	.000	.000
	Ν	11184	11184	11184	11184	11184	11184	11184	11184	11184
0-1.99 HS GPA	Pearson Correlation	058**	1	115**	118**	230**	- .047**	.151**	.015	- .154**
	Sig. (2- tailed)	.000		.000	.000	.000	.000	.000	.117	.000
	Ν	11184	11207	11207	11207	11207	11207	11207	11207	11207
2-2.749 HS GPA	Pearson Correlation	154**	115**	1	257**	500**	- .103**	.240**	.021*	- .244 <sup>**</sup>
	Sig. (2- tailed)	.000	.000		.000	.000	.000	.000	.027	.000
	Ν	11184	11207	11207	11207	11207	11207	11207	11207	11207
2.750-3.09 HS GPA	Pearson Correlation	101**	118**	257**	1	514**	- .106**	.111**	.010	- .113**
	Sig. (2- tailed)	.000	.000	.000		.000	.000	.000	.277	.000
	Ν	11184	11207	11207	11207	11207	11207	11207	11207	11207
3.1-3.99 HS GPA	Pearson Correlation	.169**	230**	500**	514**	1	- .206**	295**	018	.297**
	Sig. (2- tailed)	.000	.000	.000	.000		.000	.000	.054	.000
	Ν	11184	11207	11207	11207	11207	11207	11207	11207	11207

Table 4.31 Correlations - Effect of HS GPA Range and Ethnicity on WSU Graduation



Table 4.31 cont.

		Grads	0-1.99	2-2.749	2.75-3.09	3.1-3.99	4-4.57	Af Am	Latino	White
4-4.57 HS GPA	Pearson Correlation	.154**	047**	103**	106**	206**	1	133**	034**	.144**
	Sig. (2- tailed)	.000	.000	.000	.000	.000		.000	.000	.000
	Ν	11184	11207	11207	11207	11207	11207	11207	11207	11207
African American	Pearson Correlation	240**	.151**	.240**	.111**	295**	- .133**	1	151**	- .924**
Student	Sig. (2- tailed)	.000	.000	.000	.000	.000	.000		.000	.000
	Ν	11184	11207	11207	11207	11207	11207	11208	11208	11208
Latino Student	Pearson Correlation	034**	.015	.021*	.010	018	- .034 <sup>**</sup>	151**	1	- .239**
	Sig. (2- tailed)	.000	.117	.027	.277	.054	.000	.000		.000
	Ν	11184	11207	11207	11207	11207	11207	11208	11208	11208
White Student	Pearson Correlation	.249**	154**	244**	113**	.297**	.144**	924**	239**	1
	Sig. (2- tailed)	.000	.000	.000	.000	.000	.000	.000	.000	
	Ν	11184	11207	11207	11207	11207	11207	11208	11208	11208

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

The first number in each cell was the Pearson's correlation coefficient, the second number the significance level and the third number, the sample size. At the one percent, p < .01 significance level, there was a negative linear relationship between WSU graduates with a GPA below 3.10. There was a positive linear relationship at the high school cumulative GPA's above 3.09. These results were statistically significant. This research failed to reject the null concluding no relationship between WSU graduates and high school cumulative GPA's. All of the correlation coefficient's were in the r=0.10 – 0.30 ranges indicating a small effect size.



Examining ethnicity, being African American had a negative linear relationship to WSU graduates r=-0.24 at the one percent, p < .01significance level. White students had a positive linear relationship to WSU graduates r=0.249. This data supported the research finding under question three that the highly segregated geographic location provided advantage to non-minority ethnicity for graduation at WSU.

## **Research Question 9**

Was there a difference in the academic preparation of graduates by ethnicity and gender as measured by ACT Composite score and high school GPA? Specifically did students with the same incoming high school preparation graduate at the same rate?

Table 4.32 was an academic preparedness profile of the 11,207 incoming freshman by ethnicity and gender. African American and Latino students enrolled at Wayne State University with high school GPA's and ACT scores below that of White students; they earned credits at less than full time status more than White students; and were more likely to stop/drop-out by the second year.

	Non-	Graduates	Gr	aduates
	ACT Composite	Cumulative HS GPA	ACT Composite	Cumulative HS GPA
African American Male	17.46	2.18	19.82	3.07
African American Female	17.12	2.34	19.82	2.84
Group Score	17.23	2.29	19.82	2.89
Latino Male	19.52	2.25	22.07	2.44
Latino Female	19.02	2.44	20.65	3.34
Group Score	19.23	2.36	21.09	3.06
White Male	22.90	3.00	24.00	3.18
White Female	22.41	3.22	23.33	3.35
Group Score	22.63	3.12	23.60	3.28
All Cases	20.52	2.79	23.12	3.24

 Table 4.32. Comparison Academic Preparation between WSU Non-Graduates and Graduates



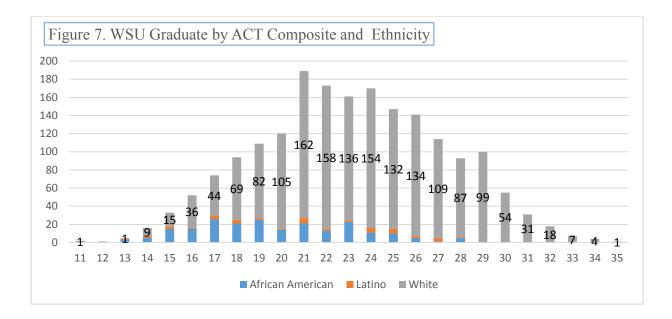
Table 4.33 descriptive statistics, showed that White students had the highest maximum ACT Composite score of 35, with African Americans at 32 and Latino students with a maximum score of 31. Those maximum scores, however, were not reflective of their groups. The mean ACT scores for African American and Latino students was more than four standard deviations below the maximum score. For Whites, this difference was just over three standard deviations below the maximum. Those outlier students exist, however, those scores were not indicative of the groups' academic preparedness. The mean ACT Composite score of all students, graduates and non-graduates, was 17.23 for African American students, 19.23 for Latino students and 22.64 for White students.

					95% Confidence Interval for Mean			
			Std.	Std.	Lower Upper			
	Ν	Mean	Deviation	Error	Bound	Bound	Minimum	Maximum
African American	4132	17.233	3.4059	.0530	17.129	17.337	7.0	32.0
Latino	421	19.230	3.8720	.1887	18.859	19.601	9.0	31.0
White	6654	22.634	3.9865	.0489	22.538	22.729	9.0	35.0
Total	11207	20.515	4.5796	.0433	20.430	20.599	7.0	35.0

Table 4.33. Descriptive – ANOVA ACT Composite Score by Ethnicity

Figure 7 showed graduates by ACT scores distribution. The majority of Latino and White students enrolled with a 21 or higher ACT Composite score. The majority of African American students were below 21 ACT Composite.







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Table 4.34 showed the number of students by ethnicity at each ACT Composite score level.

		#AA	#Latino	#White	Total
ACT	11	1		1	2
Composite	12	1			1
Score	13	3	1	1	5
	14	5	2	9	16
	15	15	3	15	33
	16	15	1	36	52
	17	26	4	44	74
	18	21	4	69	94
	19	25	2	82	109
	20	14	1	105	120
	21	21	6	162	189
	22	13	2	158	173
	23	23	2	136	161
	24	11	5	154	170
	25	10	5	132	147
	26	5	2	134	141
	27	1	4	109	114
	28	5	1	87	93
	29	1		99	100
	30	1		54	55
	31			31	31
	32			18	18
	33			7	7
	34			4	4
	35			1	1
	Total	217	45	1648	1910

Table 4.34. Students Per Score by Ethnicity

An ANOVA was completed on the 11,207 students to confirm the descriptive results. In Table 4.35 the mean high school cumulative GPA for African Americans was 2.29, for Latino students 2.36 and for White students 3.12. There were outliers, however group characteristics fell well below several standard deviations from the maximum GPA.



					95% Confidence Interval for Mean			
			Std.		Lower	Upper		
	Ν	Mean	Deviation	Std. Error	Bound	Bound	Minimum	Maximum
African American	4132	2.29022897	2.572112853	.040013806	2.21178037	2.36867758	- 9.000000	4.130000
Latino	421	2.36465558	2.840865513	.138455313	2.09250390	2.63680726	- 9.000000	4.010000
White	6654	3.12167122	1.761665168	.021596430	3.07933529	3.16400714	- 9.000000	4.570000
Total	11207	2.78668211	2.179004417	.020583225	2.74633537	2.82702885	- 9.000000	4.570000

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Table 4.35. Mean – High School GPA by Ethnicity

In addition to the ethnic groups differing by ACT Composite score and high school GPAs', they were of unequal size, which meant that Type I error levels were not guaranteed. Table 4.36 provided the results of the Tukey post hoc test. None of the ethnic groups were homogeneous.

		Subset for $alpha = 0.05$			
Ethnicity of Student	N	1	2	3	
African American	4132	17.233			
Latino	421		19.230		
White	6654			22.634	
Sig.		1.000	1.000	1.000	

Table 4.36. Tukey Homogeneous Subsets – ACT Composite Score

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 1083.973.

b. The group sizes are unequal. The harmonic mean of the group sizes is used.

Type I error levels are not guaranteed.



Table 4.37 provided the results of the Tukey post hoc test for high school GPA analysis. In the homogeneous subset the research showed that African American and Latino students were similar in their high school GPA upon enrolling at Wayne State University as indicated by subset one. White students were alone in their subset showing no ethnic peers in this research.

Table 4.57. Tukey Holliogeneous Subsets – HS OPA						
		Subset for $alpha = 0.05$				
Ethnicity of Student	Ν	1	2			
African American	4132	2.29022897				
Latino	421	2.36465558				
White	6654		3.12167122			
Sig.		.697	1.000			

Table 4.37. Tukey Homogeneous Subsets - HS GPA

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 1083.973.

b. The group sizes are unequal. The harmonic mean of the group sizes was

used. Type I error levels are not guaranteed.

Table 4.38, was the ANOVA table results of the null hypothesis between and within

group mean ACT Composite scores:

H<sub>o</sub>: the means of all groups were the same

H<sub>a</sub>: the means of all groups were not the same.

The large F-statistic, 2629.121 with p < .001 indicated that ACT Composite scores were not

equal, therefore this research rejected the null.

Table 4.38. ANOVA – ACT Composite

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	75067.424	2	37533.712	2629.121	.000
Within Groups	159949.941	11204	14.276		
Total	235017.365	11206			



Table 4.39, tested the hypothesis between and within group means of high school cumulative GPAs' using ANOVA table:

H<sub>o</sub>: the means of all groups were the same

H<sub>a</sub>: the means of all groups were not the same.

The large F-statistic, 200.677 with p<.001 indicated that high school cumulative GPA were not

equal, therefore this research rejected the null. The means of all the groups were not the same.

Table 4.39. ANOVA - High School GPA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1840.076	2	920.038	200.677	.000
Within Groups	51366.687	11204	4.585		
Total	53206.763	11206			

ANOVA Table 4.40 showed of mean high school cumulative GPA's at different break points.



		Sum of Squares	df	Mean Square	F	Sig.
Range0-1.99 HS GPA	Between Groups	.006	2	.003	.147	.864
	Within Groups	42.025	1907	.022		
	Total	42.032	1909			
Range2-2.749 HS GPA	Between Groups	1.493	2	.747	12.441	.000
	Within Groups	114.456	1907	.060		
	Total	115.950	1909			
Range2.750-3.09 HS GPA	Between Groups	4.286	2	2.143	20.880	.000
	Within Groups	195.735	1907	.103		
	Total	200.021	1909			
Range3.1-3.99 HS GPA	Between Groups	4.031	2	2.015	9.432	.000
	Within Groups	407.487	1907	.214		
	Total	411.518	1909			
Range4-4.57 HS GPA	Between Groups	2.220	2	1.110	11.658	.000
	Within Groups	181.562	1907	.095		
	Total	183.782	1909			

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Table 4.40 ANOVA - WSU Graduates by High School GPA

- 1. Less than 2.00 HS Cumulative GPA reported an F-statistic of .147 with 2 and 1907 degrees of freedom and p > .05. This research failed to reject the null hypothesis because the between-groups and within-groups mean square were equal, ethnic groups did not vary in their academic preparation for college at this high school cumulative GPA. Students at this level graduated at the same rate.
- 2. At 2.0 to 2.749 HS Cumulative GPA reported an F-statistic of 12.441 with 2 and 1907 degrees of freedom and p < .05. This research rejected the null hypothesis because the means at this level were not all equal, ethnic groups varied in their academic preparation for college at this high school cumulative GPA.
- 3. At 2.75 to 3.09 HS Cumulative GPA reported an F-statistic of 20.880 with 2 and 1907 degrees of freedom and p < .05. This research rejected the null hypothesis because the means at this level were not all equal, ethnic groups varied in their academic preparation for college at this high school cumulative GPA.



- 4. At 3.10 to 3.99 HS Cumulative GPA reported an F-statistic of 9.432 with 2 and 1907 degrees of freedom and p < .05. This research rejected the null hypothesis because the means at this level were not all equal, ethnic groups varied in their academic preparation for college at this high school cumulative GPA.
- 5. At 4.0 to 4.57 HS Cumulative GPA reported an F-statistic of 11.658 with 2 and 1907 degrees of freedom and p < .05. This research rejected the null hypothesis because the means at this level were not all equal, ethnic groups varied in their academic preparation for college at this high school cumulative GPA.

In conclusion, the assertion that ethnic groups were the same was rejected by this research at each high school cumulative GPA range from 2.0 to 4.57. Students in the less than 2.0 range were equal in their means across ethnicity. This was consistent with descriptive statistics characteristics of students by ethnicity.

Table 4.41 was the results from the ANOVA table testing the null hypothesis for nongraduates. This analysis provided p < .05 for all high school cumulative GPA ranges. Therefore the null was rejected at each GPA level. There was a difference in means between and within group means by the ethnicity of non-graduates.



		Sum of Squares	df	Mean Square	F	Sig.
Range0-1.99 HS GPA	Between Groups	12.888	2	6.444	138.601	.000
	Within Groups	520.929	11204	.046		
	Total	533.817	11206			
Range2-2.749 HS GPA	Between Groups	109.398	2	54.699	363.905	.000
	Within Groups	1684.082	11204	.150		
	Total	1793.480	11206			
Range2.750-3.09 HS	Between Groups	24.094	2	12.047	73.747	.000
GPA	Within Groups	1830.228	11204	.163		
	Total	1854.322	11206			
Range3.1-3.99 HS	Between Groups	255.227	2	127.614	561.465	.000
GPA	Within Groups	2546.522	11204	.227		
	Total	2801.749	11206			
Range4-4.57 HS GPA	Between Groups	9.126	2	4.563	118.855	.000
	Within Groups	430.156	11204	.038		
	Total	439.283	11206			

Table 4.41. ANOVA - WSU Non-Graduates by High School GPA

For both graduates and non-graduates the null hypothesis was rejected. The groups in this research varied by ethnicity except for graduates at the lowest high school GPA of less than 2.0.

Table 4.42 was an analysis of graduates by both high school GPA and ACT Composite scores. Student below both of those WSU admissions thresholds rarely graduated. Of the 1,910 graduates, only 3.24 percent or 62 students earned a college degree. Of the 62 students who earned a degree, 54.84 percent or 34 students were White. African American students comprised 41.94 percent or 26 students and Latino students only 2 students. With the same academic preparation, White students graduated at this level at a higher rate than African American and Latino students who populated this criteria at higher rates than White students but who graduated less than White students. At each ACT Composite distinction, White students graduated in greater numbers than the minoritized students.



	HSGPA	African American		Latino				All			
		Male	Female	Total	Male	Female	Total	Male	White Female	Total	
Below 16	0-1.99	0	1	1	0	0	0	0	0	0	1
ACT	2-2.749	2	5	7	0	1	1	2	2	4	12
	2.75-3.09	2	3	5	2	0	2	2	7	9	16
	3.10-3.99	3	9	12	0	3	3	1	11	12	27
	4.0-4.57	0	0	0	0	0	0	0	1	1	1
Total				25	5		e	5		26	57
16 ACT	0-1.99	0	0	0	0	0	0	0	0	0	0
	2-2.749	2	1	3	0	0	0	1	0	1	4
	2.75-3.09	0	5	5	1	0	1	3	9	12	18
	3.10-3.99	1	6	7	0	0	0	5	18	23	30
	4.0-4.57	0	0	0	0	0	0	0	0	0	0
Total				15	5		1			36	52
17 ACT	0-1.99	0	2	2	0	0	0	0	1	1	3
	2-2.749	1	3	4	0	1	1	4	2	6	11
	2.75-3.09	4	8	12	0	0	0	3	5	8	20
	3.10-3.99	2	6	8	0	3	3	7	22	29	40
	4.0-4.57	0	0	0	0	0	0	0	0	0	0
Total				26	Ď		2	1		44	74
18 ACT	0-1.99	0	1	1	0	0	0	1	1	2	3
	2-2.749	0	2	2	0	0	0	1	2	3	5
	2.75-3.09	3	5	8	1	2	3	11	9	20	31
	3.10-3.99	0	10	10	0	1	1	12	31	43	54
	4.0-4.57	0	0	0	0	0	0	0	1	1	1
Total				21	-		2	1		69	94
19 ACT	0-1.99	0	0	0	0	0	0	1	2	3	3
	2-2.749	1	2	3	0	0	0	8	1	9	12
	2.75-3.09	1	5	6	0	0	0	9	16	25	31
	3.10-3.99	1	15	16	0	2	2	13	32	45	63
	4.0-4.57	0	0	0	0	0	0	0	0	0	0
				25	5		2	2		82	109
20 ACT	0-1.99	0	0	0	0	0	0	0	1	1	1
	2-2.749	1	2	3	0	0	0	3	1	4	7
	2.75-3.09	0	3	3	0	0	0	6	14	20	23
	3.10-3.99	1	7	8	0	1	1	24	52	76	85
	4.0-4.57	0	0	0	0	0	0	1	3	4	4
Total				14	ŀ		1			105	120

Table 4.42 WSU Graduates (1,910 students) by Ethnicity, ACT Scores and High School GPA



Table 4.42 cont.

	HSGPA	African American				Latino			White			
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
ACT	0-1.99	0	2	2	1	0	1	14	15	29	32	
21+	2-2.749	4	5	9	0	1	1	44	19	63	73	
	2.75-3.09	3	11	14	1	2	3	43	28	71	88	
	3.10-3.99	17	43	60	8	14	22	394	535	929	1011	
	4.0-4.57	0	6	6	0	0	0	60	134	194	200	
Total				91			27			1286	1404	

Table 4.43 was an analysis of non-graduates by high school GPA and ACT Composite score. Of the 9,274 non-graduates, 19.80 percent or 1,836 students were below both the ACT and cumulative high school GPA for regular admission. Of the 1,836 students who did not earn a degree, 15.30 percent or 281 students were White. African American students comprised 79.74 percent or 1,464 students and Latino students 4.96 percent or 91 students. With the same academic preparation, White non-graduates were less likely at the below admission criteria, yet graduated at this level at a higher rate than African American and Latino students who populated this criteria at higher rates than White students.

	HSGPA	Af	African American			Latino			White		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
Below 16	0-1.99	75	108	183	3	2	5	5	4	9	197
	2-2.749	211	355	566	13	13	26	20	22	42	634
	2.75-3.09	90	274	364	9	9	18	27	42	69	451
	3.10-3.99	51	241	292	4	16	20	18	34	52	364
	4.0-4.57	1	1	2	0	0	0	1	0	1	3
Total				1407			69			173	1649

Table 4.43 WSU Non-Graduates (9,274) by Ethnicity, ACT Scores and High School GPA



Table 4.43 cont.

	HSGPA		rican Ame		Mala	Latino	T - (-1	Mala	White	T - ( - 1	All
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
16 ACT	0-1.99	20	28	48	1	2	3	3	5	8	59
	2-2.749	74	91	165	2	8	10	12	16	28	203
	2.75-3.09	46	90 26	136	5	4	9	24	31	55	200
	3.10-3.99	26	96	122	8	11	19	30	44	74	215
Total	4.0-4.57	0	1	1 472	0	0	0 41	0	0	0 165	1 678
	0-1.99	12	20	33	1	1		6	2	8	43
17 ACT		13	20 76		1 3	1 6	2	6			
	2-2.749	58	76	134			9	17	10	27	170
	2.75-3.09	36	100	136	4	10	14	38	44	82	232
	3.10-3.99	28	118	146	2	11	13	45	55	100	259
T ( 1	4.0-4.57	0	1	1	0	0	0	0	1	1	2
Total				450			38			218	706
18 ACT	0-1.99	15	25	40	2	2	4	4	3	7	51
	2-2.749	36	68	104	7	7	14	32	16	48	166
	2.75-3.09	45	81	126	5	9	14	52	48	100	240
	3.10-3.99	29	102	131	2	10	12	37	92	129	272
	4.0-4.57	0	2	2	0	0	0	0	0	0	2
Total				403			44			284	731
19 ACT	0-1.99	12	14	26	0	1	1	2	5	7	34
	2-2.749	41	51	92	2	3	5	32	22	54	151
	2.75-3.09	32	59	91	6	5	11	58	63	121	223
	3.10-3.99	27	105	132	6	9	15	57	129	186	333
	4.0-4.57	0	1	1	0	0	0	3	0	3	4
				342			32			371	745
20 ACT	0-1.99	3	10	13	4	0	4	3	2	5	22
	2-2.749	31	29	60	5	3	8	23	15	38	106
	2.75-3.09	23	33	56	5	1	6	61	56	117	179
	3.10-3.99	27	46	73	3	10	13	96	156	252	338
	4.0-4.57	0	1	1	0	1	1	1	1	2	4
Total				203			32			414	649
21+ ACT	0-1.99	15	21	36	1	7	8	41	28	69	113
	2-2.749	113	81	194	20	7	27	327	139	466	687
	2.75-3.09	51	92	143	10	6	16	243	185	428	587
	3.10-3.99	65	183	248	28	39	67	992	1188	2180	2495
	4.0-4.57	1	11	12	1	1	2	76	144	220	234
Total				633			120			3363	4116



In conclusion, this chapter answered the question whether or not students differed in academic achievement by independent variable ethnicity. High school GPA and ACT Composite score was the proxy to measure prior high school preparation. Academic college persistence was analyzed by credits earned at both the first and fourth semester. How students enrolled at the university and if they participated in a treatment program were analyzed to understand the types of students served and the pathways students used to come to the university.

The findings in this chapter were, one, students took different pathways to the university. Latino students came non-attached to a treatment program or through the Chicano Boricua Studies. African American students enrolled non-attached or through minority based programs: Division of Community Education, TRiO Student Support Services, Math Corps, and Urban Scholars; White students enrolled through the Honors program or non-attached. The significance of those admittance trends were that minoritized students were labeled deficient before they took their first course.

This research uncovered that the treatment programs targeted different populations and had different mission statements serving diverse groups. That treatment programs were more effective in retaining students through the second year than the control group. However, treatment programs were less effective in graduating their participants than the non-treatment group.

This research also found that higher high school cumulative GPA was not a predictor of future college graduation. As a group, African American students enrolled with lower cumulative high school GPA than Latino and White students so this research showed that the university admission policy of 2.75 did little to predict academic success. Using ANOVA



analysis, means were equal for WSU graduates only at the below 2.0 entering high school GPA. At the higher levels, students graduated at different rates, suggesting that beyond the 2.0 GPA students with the same high school GPA graduated at different rates. Specifically, that students' progressed differently through the university by ethnicity according to their high school cumulative GPA



# **CHAPTER 5. SUMMARY**

The genesis of this research was to determine if ethnic minority students at Wayne State University progressed differently than White students at the same incoming high school cumulative GPA and ACT Composite score. This research was prompted by two articles over a thirteen-year period, one extolling the decrease in graduation rates of African Americans while the other spoke of Wayne State's heyday in serving African American students.

## Overview

This research was to determine if a relationship existed between ethnicity and persistence and ultimately graduation. The population under analysis was first time-college, African American, Latino and Whites students enrolled between fall 2002 and fall 2009. In addition, only students who were United States citizens or permanent residents with an ACT Composite score, who enrolled at least one semester, were included.

The treatment programs identified in this research, listed in Appendix A, were selected based on their explicit or implied relationship with the ethnic groups in this research. In no way was the treatment list exhaustive. Wayne State University supported a number of initiatives, formal and informal that strove to create a community atmosphere such as learning communities, fraternities and sororities and athletic teams. What made the treatment programs in this research unique was that each treatment was an academic support program with a physical location on campus, a university budget and paid staff independent of other programs. In addition, some of the treatment programs had specific mission statements and funding sources tied to serving underrepresented minorities and/or students with disabilities.



This research reported results by three distinct groups: all students, graduates, and nongraduates. Within those parameters ethnicity and gender were analyzed. Descriptive frequency cross tabulation analysis, ANOVA, and Chi-square statistics were performed on the population using the Statistical Package for Social Sciences (SPSS), version 23.

# Findings

What this research uncovered was that students were admitted to the university race-d, to borrow the phrase from Kendall Thomas, a Critical Race theorist. This meant they were assigned and invested with attributes even before their arrival on campus. Treatment began with identification as a member of the treatment group, which in itself had implications since many of the treatment programs were conditional admit programs.

# **Research Questions**

Nine research questions were examined for this study using inferential statistical analysis with decisions based on the statistical significance criteria, p < .05 alpha level.

Research question 1: What pathways did African Americans use to enroll at the university as compared to Latino and White students? Of the 11,207 students in this research, treatment participants made up 26.7 percent or 2,987 students. African Americans made up 52.26 percent or 1,561 students of all treatment participants. Latino students comprised 7.40 percent or 221 students of all treatment participants. White students comprised 40.34 percent or 1,205 students of all treatment participants. The Chi-Square,  $X^2$  (12, N=11,207) = 6033.380, *p* < .001, proved that the null hypothesis be rejected: H<sub>o</sub>: There was no association between ethnicity and treatment programs. In addition, of the 4,132 African American students in this research, 35



percent enrolled through only four gateway programs – DCE, TRiO Student Support Services, Math Corp and Urban Scholars.

Research question 2: Did participation in a university gateway program increase retention as measured by credits earned after two years? The treatment programs retained 63.74 percent of their participants as compared to the control group retention of 57.67 percent after two years. This research found that the treatment programs recruited and enrolled students based on different goals and objectives that potentially impacted overall graduation rates. Descriptive statistics cross tabulations, ANOVA and Chi-Square analysis were used to reach this conclusion.

The majority of the 1,910 graduates in this study, 83.98 percent, came from the control group with 10.24 percent from the treatment programs. However, the control group graduation rate, for their 8,220 students who initially enrolled, was 19.51 percent. For the 2,987 treatment program students who initially enrolled, their graduation rate was 16 percent. This was significant in that the control group students were regularly admitted to the university, whereas treatment participants were primarily conditionally admitted. Based on the contingency model discussed in chapter four, students should have been disbursed more evenly between treatment and control, with more African American and Latino students admitted regular and fewer White students admitted regular.

Research question 3: Did county median household income, predict WSU graduation? Using Pearson's correlation coefficient, White students who graduated from a Wayne county high school were six times more likely to graduate WSU than African American students who graduated from a Wayne county high school. Whites students who graduated from a Macomb or Oakland county high school were more than four times more likely to graduate from WSU than



African American students who graduated from a Macomb or Oakland county high school. For White students, geographic location was not a factor in their progression; however, it was a factor in how African American students progressed through the university. Latino students were not affected by geographic location, their graduation rates remained consistent across the three counties, however, they were three times less likely to graduate from Macomb and Wayne counties as White students and 2.77 times less likely to graduate from WSU from Oakland county.

Research question 4: Did first year enrollment trends of African American students differ from Latino and White students? Using cross tabulation descriptive statistics, ANOVA analysis, Levene test and Tukey Multiple Comparison test, this research concluded that African American males earned credits at a lower rate than the other subgroups in the research. The average credits earned after one year ranged from a low of 5.92 credits by DCE students to a high of 26.55 credits earned by Honor students. The majority of African American students were less than fulltime 87.03 percent or 2,811 students. Latino students were less than full-time 77.27 percent or 255 students. White students were less than full-time 54.43 percent or 1,960 students. Early intervention made a difference for treatment participants in TRiO, Urban Scholars, Math Corps and Honors treatment. In each of those programs the participants earned more credits after one year than the control group students. This suggested that intervention for minority-focused treatments did indeed help with retention.

Research question 5: Was there a correlation between high school cumulative GPA and WSU graduation? Using Spearman's correlation coefficient, there was not a relationship between in coming high school cumulative GPA's between 2.750 - 4.57. However, in looking at the



WSU graduates in this research, 91.2 percent entered the university with a high school GPA's at 2.75 or higher. The probability of earning a degree at WSU with a high school cumulative GPA above 2.750 was not enhanced. Students matriculating to WSU with high school cumulative GPA's above 2.750 were just as likely to graduate or not graduate. However, a high school cumulative GPA below 2.750, increased the odds that those students would be less likely to earn a WSU degree. The descriptive frequency distribution method, overwhelmingly supported that of the 1,910 graduates, 91.2 percent were regular admissible with a high school cumulative GPA of 2.750 or higher. However, conversely, 71.63 percent of non-graduates had a high school cumulative GPA of 2.75 or higher therefore this research concluded that high school GPA's were not a good indicator of future academic success and graduation at WSU.

Research question 6: Do treatment participants vary statistically in their academic preparation for college as measured by high school GPA? Yes, the overall high school cumulative GPA for incoming students was 2.78 which was above the regular admit threshold for WSU. However, treatment programs differed greatly from each other with DCE students admitted, with a low GPA of 1.71 with Honors at the high end of admittance with 3.64. This variance reflected the mission and purpose of the treatment programs. The control group mean GPA was 2.87, again, above regular admit status for the university. Descriptive statistic methods were used to reach this conclusion as well as ANOVA analysis and Levene test.

Research question 7: Did ACT subject scores predict college persistence after two years the same across ethnicity? African American students were over represented in the below 16 ACT scores, whereas White students were over represented in the 21 and higher ACT scores. This result was repeated in all subject group scores. Of students with below 17 ACT score,



almost 20 percent of African American students were not progressing with their cohort compared to 2.6 percent of White students. Cross tabulation method were used to find credits earned by ethnicity and ACT subject scores. This analysis suggested that the university admission standard of a minimum ACT Composite score of 21 for regular admission was better at predicting retention for White students through the second year and not minoritized students.

Research question 8: Did students persist differently by ethnicity at the same high school cumulative GPA? Using Pearson's correlation coefficient, for ethnicity and high school GPA, r=.423, p < .001 showed a medium and significant linear relationship. Students persisted differently by ethnicity. For ethnicity and credits earned, r=.480, p < .001 showed a medium and significant linear relationship. Again, students persisted differently by ethnicity.

However, there was more of a linear relationship between credits earned and high school GPA, with r= .566, p < .001 showed a large and significant linear relationship. To understand this relationship better, Pearson's correlation was used to discern differences in credits earned at different high school cumulative GPA ranges. There was a negative relationship for GPA's and WSU graduation below 3.09 and a negative relationship for WSU graduation for African Americans (r= -.240) and Latino (r= -.034) ethnicity at the p < .001. For White students there was a positive correlation between WSU graduation and White ethnicity at r= .249, p < .001.

When looking at the correlation between African American and White students, r = -.924, p < .001, there was a very large negative correlation. African American and Latino students had an  $r = -.151 \ p < .001$ , there was a small negative correlation. Latino students had a negative correlation to White students with r = -.239. Based on this research, being Black or Brown had a negative correlation to graduation at WSU. This data provided support to question three of this



research that the highly segregated communities provided advantage to non-minority ethnicity for graduation at WSU.

Research question 9: Was there a difference in the academic preparation of graduates by ethnicity and gender as measured by ACT Composite score and high school GPA? The research concluded that the ethnic groups were not the same in their prior academic preparation for college. This was consistent with descriptive statistics characteristics of students by ethnicity. The null hypothesis of ethnic groups with the same mean was rejected by this research at each high school GPA range from 2.0 to 4.57. Students in the less than 2.0 range were equal in their means across ethnicity. This analysis was supported through ANOVA and descriptive statistics.

## Discussion

The act of labeling students as treatment has created the perception that all visually identifiable minoritized students at Wayne State University were a part of treatment program that caused them to be treated differently, as "other" on campus. White students in treatment, varied by class and gender, had been able to stuff their academic and social pickup trucks with goodies not otherwise available to people of color (Fine, 2004).

In addition to the problem of criminal profiling, ethnic minorities experienced academic profiling as well. In my capacity as a university administrator, each semester I received complaints from students harassed for standing outside of the residential facilities required to produce university identification to phone calls and visits from various department personnel complaining of student noise in 'their' libraries or laboratories. My response was always, how did you know they were TRiO? As indicated in this research, TRiO students comprised less than 10 percent of the university African American population, but the assumption held by many was



that minority students were conditional admit students – less than regular admissible, and therefore trouble. This example demonstrated how ethnicity could affect how employees and students perceived the character of the ethnic minority. The majority engaged in deliberative and sometimes unconscious exploitation of minorities, excluding them from services or experiences that non-minority students took for granted. (Dovidio, Glick & Budman, 2005).

This research provided support to the assumptions listed in chapter one: that Non-White ethnicity was a factor in academic achievement at WSU; that the lower socio-economic status was a factor in academic achievement at WSU; that minority ethnicity combined with gender was a factor in academic achievement at WSU; and that treatment could remedy the achievement gap. Treatment has not been the remedy to the achievement gap because the problems are not the lesser-prepared students, but how the lesser-prepared students, who happen to be Black and Brown, are perceived and treated on campus. This research showed that despite African American incoming student preparation below that of Latino and White students, some were earning degrees. Therefore, the academic achievement gap shrouded in student, family and cultural deficit theories have not worked and will not work until the negative perception of minoritized students on campus are addressed and those attitudes destroyed.

The Eurocentric university environment centered and functioned around the dominant White culture as in the case of ACT scores. Standardized tests, are reflective of the majority culture, Critical race theory posits that they measure distance from the norm with African American and other minorities disproportionately represented at the bottom.

When the Honors/White gateway program was juxtaposed with the DCE/African American gateway program, a clearer picture emerged as to why there was a graduation



differential distinguished by ethnicity. Students not race-d, or in the control group, graduated from the university at higher rates by ethnicity than their corresponding treatment peers. Of the White graduates, 14 percent were from the Honors treatment (231 White Honors graduates/1648 all White graduates) as compared to 85.19 percent White graduates from the control group.

The DCE program achieved its mission of serving underrepresented students, and for that they should be appreciated in their efforts to introduce and demystify higher education to this lower ACT Composite high school GPA population. However, could the university be doing those groups a disservice since many accrue debt and do not graduate? As stated earlier, if not the DCE treatment program, African Americans would be significantly removed from the college landscape. However, are we doing those treatment students a disservice? Was the university's urban mission and the goal of student diversity achieved at the expense of those more vulnerable students whose count increased enrollment numbers, who were often Pell eligible bringing federal resources to the university, who paid tuition and then sadly left with no degree? Tinto, 2008 stated that access to higher education for low-income students had increased over the past two decades, but so too, had the the gap in graduation rates. For many minoritized, low in-come students the open door to higher education had become a revolving door.

Hanushek, Kain, and Rivkin explained the academic achievement gap between Blacks and Whites in terms of the concentration of Blackness within segregated schools. They proposed that segregation lowered Black achievement not because of White absence but because of Black concentration, that desegregating schools was not the solution in itself, but more of a tool to achieve the right racial mix. The treatment programs at Wayne State University were segregated. As important as peer group synergy was to student success, this research showed that the



external factors to treatment impacted the academic parity experienced by African American students in how they were viewed and received on campus. As this research outlined, high school cumulative GPA's were not a predictor of college success.

The profile of a WSU non-graduate, based on this research had an ACT Composite below 19 with a high school GPA below 2.84. The statistics in this research confirmed African Americans enrolled with lower ACT Composite scores and high school cumulative GPA's than White students. Although these indicators did not predict future success at WSU, it suggested that African American students were coming to the university differently prepared and that greater institutional support or connectivity could be necessary to raise their graduation rates. That was not a negative. The negative was that African American students were admitted to WSU believing they had a shot at earning a degree, when historical graduation rates and often ability to pay, suggested that university resources and culture had not aligned to understand how to serve them. Therefore, in this reality, WSU need not admit African American students whom they are not willing to support entirely through graduation.

Wayne State University has contributed enormous resources – both monetary and nonmonetary in the form of direct aid to students and in support of treatment programs, through staff and university resources. However this analysis of gateway programs showed that with university support at the current level, African American students would do better to enroll at other higher education institutions with more favorable graduation rates.

#### Recommendations

The African American students who did graduate from WSU were a testament to their resilience and deep-seated desire to transcend their often humble beginnings. Table 4.32 showed



that the ACT Composite score for WSU African American graduates was well below the mean ACT Composite for Latino and White WSU graduates. So if ACT Composite is not a predictor of success at WSU then more needs to be done to support African American students upon their arrival. To paraphrase a Supreme Court decision, if the claim was that disadvantaged children simply could not make it, then the constitutional answer was to give them a chance (Belfield & Levin, 2007; Kozol, 1991). This researcher tends to err on the side of giving minoritized students a real opportunity. Like the Kalamazoo Promise and other similar programs, WSU should waive tuition for African American students whom they enroll. Relieving the financial burden combined with acclamation treatments for all students would increase graduation of this population.

Discussions of race are uncomfortable, measurement of racism impossible. But the effects of racism are real. The disparity in the graduation attainment rates by ethnicity when incoming high school cumulative GPA does not accurately predict future success. When students of color are over represented in the lower academic preparation ranks, and the gateways to enroll are deficit treatment programs, the intangible, ethnicity, must be suspect. Critical Race Theorist challenged scholars to understand how privilege and status were allocated at the university. Like the article, *Teacher apologizes for slavery references in math homework*, cited in chapter two, the assumptions made about the over representation of students of color in treatment programs reinforce the historical subjugation of African Americans, calling into question their legitimacy on campus, while heightening ethnic divisiveness and rank imparting feelings of inferiority to minoritized students and feelings of superiority for the ethnic majority.



The tenants of Critical Race Theory need be the lens that campus community member's embrace to assess inclusivity of the campus culture. Specifically, acknowledge the possibility that racist practices may manifest themselves in standard operations. Understanding that it was not the goal to dismiss ethnicity, adopting a colorblind position, but to aggressively challenge White privilege to even the playing field for all participants challenging all isms (Thompson Christman, 2013, Harper & Wooden, 2009).

In light of this research, it was apparent that there were large pools of students interested in admission to the university, so identification of said students was not the issue. The issue becomes what to do with students who traditionally have not been successful? In light of the micro-barriers identified, a hard re-set in the thinking within the university from incoming students to faculty, staff and administrator's needs to occur in order to change the culture from the top down. All students would receive treatment. It would begin with a summer reading experience and transition into a four-year experience with students sorted into tribes of eight. The village leader, a university employee, would mentor the eight students during their tenure at WSU. The mentor/mentee relationship could be student worker experience, lunch with the eight once a month, exercises, meeting to work out in the gym.

There are many ways to create a culture of belonging. The key must include regular and often personal contact. Village leaders could make recommendations on how university resources were allocated including monitoring tribe attendance at personal counseling visits, housing issues, meal availability all in an effort to support students in their transition to the university environment. This concept was to emphasize that every student admitted belonged and they were an important member of the university community. When they were absent or



experienced a difficulty, someone close to them could intervene. JD Vance spoke of microbarriers in his book Hillbilly Elegy. Students need to develop relationships in order to be successful at the university.

Third, develop a strong incentivized partnership with area community colleges with a seamless transparent transfer process for students. Employ a university transfer liaison recruiter that goes into the community to develop student relationships in the area high schools, at the community colleges, shelters, and jails and with the university village leaders. This plan would mean a redistribution of university resources and a streamlining of existing processes to include all students in their first year.

As a former WSU administrator there are many existing offices and programs that are doing many things right – Math Corps, DCE prison outreach, and TRiO programs. The university must learn from those programs and expand the experience to include all students.

# Conclusion

A 2016 study from the National Center of Education Statistics reported that African American women are the most educated group across race and gender making them the most educated demographic in the country. How could the university replicate this success at WSU? Maybe Justice Scalia gave voice to deep-seated beliefs that African Americans belonged at slower colleges. Educators must challenge this ideology and create systems to regularly access efforts that are in place to graduate ethnic minorities. Like the treatment programs analyzed, the intentions were honorable; however the outcome showed that more work needed to be done to identify institutional processes that would graduate African Americans.



It was understood that Wayne State University served a different clientele in their acceptance of students with lower ACT Composite scores and cumulative high school GPA than other Michigan universities identified in this research. However, this was their unique niche that should be their marketing tool like give me your tired, your poor, your huddled masses yearning to breathe free.

In the current political landscape, rhetoric like equality or traditional values was as relevant today as it was during the Johnson and Reagan administration. Cyclical theory has shown the pendulum swung from conservative to liberalism and back again. From President George W. Bush to President Barack Obama the coded language was spoken in this election, with presidential candidate Hillary Clinton supporting equity issues and president-elect Donald Trump's promise to "Make America Great Again." Cyclical theory allows administrators to anticipate that the political landscape will change. However, our students are only students once.

Wayne State University needs to ensure that admitted students are adequately supported so that they can graduate. Solutions can include partnering with the community college for remediation work, early alert systems that both students and instructors can initiate, learning communities, seminars structured like Ted Talks. The university must engage students on many fronts and students must be encouraged to engage the university. Wayne State has many of those pieces already. Our efforts need to be intentional with regular and honest assessment with the goal of equity for all students.



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# APPENDIX

Treatment Program Description:

1. Center for Chicano-Boricua Studies (CBS)

The mission of the Center for Chicano-Boricua Studies (CBS) is to provide equitable access to a quality university education to Latina/o students in the Detroit metropolitan area, and to enhance the environment of diversity on the campus. The Center accomplishes its mission through a four-part program in 1) student services; 2) research on Latina/o and Latin American issues; 3) internal University advocacy on Latina/o perspectives; and 4) outreach to the Latina/o and larger metropolitan communities.

Advising/Guidance and Coaching includes the following:

- Development of educational plans
- Free tutoring in Spanish, Math and English
- Assessment of students (Nelson-Denny)
- Clarification of career goals
- Career exploration
- Selection of appropriate courses
- Interpretation of institutional requirements
- Development of decision making skills
- Reinforcement of student self-direction
- Evaluation of student progress
- Awareness about educational resources
- Development of stress management skills
- Financial Aid/ Scholarship information
- Crisis intervention
- Referral to institutional and community support services

CBS Classes:

- History of Latinos in the US
- History of Mexico
- History of Puerto Rico and Cuba
- Chicano/a Literature and Culture
- Puerto Rican Literature and Culture
- Practical Math (GST 0510)
- English 1010/1015 and 1020
- 2. Division of Community Education (DCE)



The Division of Community Education (DCE) is an alternative educational outreach program. Founded in 1969, this program provides access into baccalaureate degree programs for individuals who often presume that their prior educational performance would deny them access to a university education. Intensive counseling, and financial aid are available for program participants.

Participants in the Community Education Program are admitted to Wayne State University through the College of Lifelong Learning and are eligible to transfer into other colleges or schools within the University after satisfactory completion of twenty-four credits with a `B' average, or thirty credits with a `C' average.

This program has no restrictions on age or previous academic performance. The minimum requirements are: a high school diploma or a General Equivalency Diploma (GED), and proficiency on the DCE English Placement Exam.

Prior to admission, participants are required to take assessment tests to evaluate their academic needs and to assist them in appropriate course selection. These results are also used to plan the tutorial and developmental support which may be recommended to enhance the student's academic performance.

3. Honors Program aka – President's Award

WSU will reward National Merit Scholarship finalists interested in studying in Midtown. To be considered, you must be a National Merit finalist and notify the Irvin D. Reid Honors College of your standing by emailing honors@wayne.edu.

Award for new freshmen in fall 2017 includes:

- A reserved seat in the Irvin D. Reid Honors College
- \$12,000 per year for up to four consecutive years
- \$5,000 per year toward on-campus room and board
- One-time Study Abroad funding

Award requirements

- National Merit Scholar finalists are encouraged to apply for admission to WSU by December 1, 2016.
- Students are required to notify the WSU Honors College of National Merit Scholar finalist standing.
- This award is for fall and winter semesters and is disbursed only to students who attend full-time.

To retain the award

- Maintain a minimum 3.5 GPA
- Maintain full-time enrollment during the fall and winter semesters
- Pass at least 30 credits per academic year
- Maintain good standing within the Honors College.



• If you earn a bachelor's degree in less than four years, your scholarship will terminate at that time

Complete Free Application for Federal Student Aid (<u>FAFSA</u>) to be considered for all available funding.

International students will also be considered for this award. Only citizens of the United States and <u>eligible non-citizens</u> need to complete the (FAFSA) to be considered for other available funding.

4. The Math Corps College Success Center

The WSU Math Corps College Success Center, established in Fall 2003, is designed to serve the needs of former participants of the Math Corps who now attend Wayne State University, as well as upper-class students that are currently involved as instructors and mentors in the Math Corps program.

5. TRiO Student Support Services (TRiO)

TRiO Student Support Services is a federally funded program established through the Higher Education Amendments of 1968. The purpose of the Higher Education Act of 1965 was to strengthen the educational resources of US colleges and universities by providing financial assistance to students in post-secondary and higher education. In following that directive, Student Support Services was designed to help low-income and first generation college students and individuals with disabilities gain access to higher education and graduate from college.

Services provided by TRiO Student Support Services include financial support for Pell eligible students through WSU Board of Governors Grant up to five semesters, personal counseling, academic advising, free study groups, one-on-one individual tutoring for math, English and communication courses, class selection advise, an all-TRiO Math Learning Community, e-News letter to TRiO parents, an environment where staff develops a personal interest in their students success, and access to a community of learners and alumni of first generation low income students.

6. Urban Scholars aka – Wade McCree Incentive Scholarship

Detroit Public Schools (DPS) high schools select the recipients of Wade McCree Incentive Scholarships. Financial need is not a criterion. The Wade McCree Incentive Scholarship provides tuition for 32 credits for four years (eight semesters maximum). You are strongly encouraged to complete 16 credits each semester to ensure degree completion at the end of eight semesters.

Award requirements

- Upon graduation from high school, you must possess a cumulative 3.0 GPA.
- Eligible students must attain a composite minimum score of 21 on the ACT.



To retain your award

- You must attend full time and complete a minimum of 12 credits each fall and winter semester
- The remaining portion of the annual 32 credit hours of tuition can be used in the spring/summer semester.
- At the end of the spring/summer semester of every year, the unused portion of the 32 credit hours of tuition reverts to Wayne State University.

The academic progress of Wade McCree Scholars is reviewed at the close of each winter semester. If the following conditions occur, the Wade McCree Incentive Scholarship will be discontinued the following fall semester:

- Your cumulative GPA drops below 2.5
- You do not complete 12 credits each fall and winter semester
- You receive all "X" grades for a semester
- You withdraw from all classes without authorization in a given semester



#### ABSTRACT

# AN ANALYSIS OF GATEWAY PROGRAMS ON AFRICAN AMERICAN STUDENT RETENTION: A CASE STUDY IN AN URBAN HIGHER EDUCATION SETTING

### by

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#### May 2017

Advisor: Dr. Carolyn Muriel Shields

Major: Educational Leadership and Policy Studies

**Degree**: Doctor of Philosophy

Existing policies and processes have not gone far enough to eradicate the persistent academic achievement gap at Wayne State University. Nor has identifying poor student academic preparation prior to enrollment. By accepting this reality and responsibility, officials and members within the university community can affect change, bringing parity to retention through graduation, by becoming proficient at serving the students it enrolls.

This study unearthed some biases regarding student progression by treatment programs. White students were more likely to enroll at the university through the Honors program. These students traditionally performed high on academic measurements. Conversely, African American students were more likely to enroll at the university through an alternative admissions program such as TRiO or DCE whose mission was to support under-served often low-income and first generation students. So why then, does the institution compare the progress of Honor students with deficit enrollment students?

Another bias was in the process in which African American students enrolled at the university. This research found that 37.78 percent of African American students enrolled though



a gateway program and that those students comprised 52.26 percent of all students in a treatment program. Moreover, the treatment programs African Americans were enrolled were deficit model programs.

This was the contribution of this research. To link how those barriers pointed to how Wayne State University interacted with, provided services to, and ultimately judged the academic progress African American students were making as unsuccessful. As stated in the beginning of this research, the educational achievement gap was a by-product of a racialized society. African Americans did not become over-represented in the lower class in America because of inferior genetic makeup, nor was that the reason they were not progressing at Wayne State University. They are being removed from equal opportunity, starting their university experience behind the preparedness level of other students, and then being blamed for not being successful.



### **AUTOBIOGRAPHICAL STATEMENT**

In 2003, I became the director of the TRiO Student Support Services program at Wayne State University. In 2008, I was promoted to lead eight federal TRiO programs. In this capacity, my charge was to lead a team that would identify, enroll, and provide intensive personal and academic support to low-income and/or first generation students primarily from Detroit. Early on, my team and I were aware that the individuals we served experienced heavy attrition due to a complex multiplicity of social and economic factors. Over the period of several years, adjustments were made, believing we could enhance their academic student experience.

From my own experience, as a first generation African American college student, the financial advantages of going to college gave me access to financial opportunities set aside for college students that non-college student were rarely afforded. However additional lessons were learned in my early college career. Primarily, that in order to succeed academically I needed to be a part of a community. This lesson was reinforced during my first semester as a transfer student to the University of Michigan. My saving grace came when I befriended an older student in one of my classes. I felt that if she felt as isolated as I did, then we could support each other. It turned out that Janie Bowens was a university employee and offered me a job. She fed me, encouraged me, advised me on course selection and even had me at her home on many occasions.

The TRiO experience I tried to create at WSU was in large part shaped by my earlier college experience, of being connected. This dissertation is our report card as well as a commentary on the state of the achievement gap distinguishable by ethnicity at Wayne State University.



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