

Free To Be... You And Me: Gender, Identity, and Education in Urban Schools

Dissertation

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Abstract

The Title IX legislation of 1972 was established to promote gender equity among public entities (primarily schools) that utilize federal funding to support and sustain their operation. However, the United States (U.S.) Government developed new regulations for Title IX due to No Child Left Behind (NCLB). This change allowed public school districts to operate academic spaces specifically designed to address the unique learning needs of children based on gender. Research on single-sex schools has not shown substantive benefits for its use in countries outside the United States yet these schools provide the framework for what is implemented in U.S. schools, urban school districts in particular. The objective of this qualitative case study is to understand single-sex schools from the perspective of the attendee (i.e., boys and girls in an urban school district) as well as the pedagogical practices and experiences of their teachers. The schools are located in a large urban mid-western school district that enrolls 49,616 students. Data was collected from three schools (an all boys', an all girls', and a traditional co-educational) to provide comparative information to determine how the single-sex schools purport to address the identities of its students based on the learning environment. Through the use of portraiture, the findings suggest that pedagogical practices do not differ between the single-sex and coeducational learning environments. However, the single-sex school promotes an engaging community that enhances the academic identities of the students.

Dedication

This document is dedicated to the memory of my great grandmother Susie Gaines, my special cousin Willie Pearl Gaines, and my best friend Bryan Keith Johnson.

I also dedicate this to my grandmother Willie Mae Evans, my parents Bonnie and Earl Jones, and my precious nephew and niece Andrew and Lauren Riggins for all that you mean to me!

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Chapter 1: Introduction

Statement of the Problem

Community relationships have been and continue to be a significant component of urban schools. However, single-sex schools provide different perspectives that some researchers (Bracey, 2005; Mael, 1998; Salamone, 2004) and Black feminist scholars (Hopkins, 1997; Williams, 2004) contend are divisive to urban and Black communities. A central argument against urban single-sex schools examines the intersections that exist between racial and gender roles. Williams (2004) provides an in depth historical analysis of single-sex schools noting that the form and function of them were different for Whites and Blacks in the US. For Whites, Williams (2004) states that the schools provided an outline of roles for men as providers and women as keepers of the home, whereas Blacks were prepared for the workplace, often in positions that served Whites. Presently, Williams (2004) notes that within the debate of single-sex urban schools, Black feminists argue that single-sex schooling is a form of gender segregation. Black feminist oppose the notion that Black female-headed households are abnormal and are the cause of social problems that contribute to a variety of urban juvenile issues ranging from delinquency to persistent poverty (Williams, 2004).

For research purposes, it is important to not only examine the different perspectives of single-sex schools, but also how they tend to shift focus on non-academic

issues rather than focus specifically on curricular and/or pedagogical strategies to support the academic success of students in urban schools. Williams (2004) notes that there is a potential to shift the focus on to the all-boy's schools because boys typically are deemed to be more at-risk. Noguera (2008) states, "the trouble with Black boys is that most never have a chance to be thought of as potentially smart and talented or to demonstrate talents in science, music, or literature" (p. xxi). While most urban school districts strive to create opportunities that are beneficial to both Black boys and girls, it is often Black boys that garner more attention due to the preconceived notions that educators have regarding their behavior (Williams, 2004).

While my scope of understanding is closely associated with being Black and male, it is imperative to consider the experiences of girls in this new single-sex school environment as well. Evans-Winters (2005) states that, "African American female adolescents experiences, in particular, have been left out (subsumed under White girls' experiences), blacked out (generalized within the Black male experience), or simply pathologized" (p. 9). Williams (2004) notes a contrast between White single-sex schools and Black single-sex schools for girls. She asserts that for White girls, single-sex education helps them become empowered to pursue broader academic goals, especially in math and science, whereas for Black girls, single-sex education means they are less likely to become pregnant. Williams (2004) goes on to state that White femininity is considered virtuous and Black femininity centers on hyper sexuality.

The idea of single-sex schools in urban environments is atypical of the urban community, particularly for students of color because of the multiple layers that construct

the urban community including, but not limited to, home, school, and religious organizations (Sanders, 1998). The emphasis was placed on the creation of a strong familial environment. However, the structure of the community has changed drastically since I was in elementary and middle school. Policy makers are calling upon school districts to meet the needs of their students that were once the responsibility of the student's family and community (Shann, 1999). I was fortunate to have Black female teachers during my elementary experience. However, my educational experience was not based on gender segregation to motivate and encourage my academic success. Therefore, the implementation of a single-sex school provides an opportunity to examine the experiences of the students attending these schools and the pedagogical practices of their teachers to determine the effectiveness of this educational model.

Historical Snapshot of Single-Sex Schools in the United States

Single-sex schools have been in existence since the inception of the common school in the United States (U.S.) (Boston Latin, 2009). The Boston Latin School, which opened in 1635, was the first single-sex school specifically for boys and remained an all-boys school until 1972 when it became co-educational (Boston Latin, 2009). This, as well as other significant changes, occurred with the passage of Title IX legislation in 1972 that states, "No person...shall on the basis of sex, be excluded from participation in, be denied of, or subjected to discrimination under any educational program or activity receiving federal financial assistance" (Brown & Russo, 1999, p. 149). Even with the passage of this law, the last 40 years has seen interest increase in the education of girls (Hansen, Walker, and Flom, 1995; Weiner, 1986), especially in the subjects of math and

science (Kerr & Robinson, 2004; Sherman, 1982; Shakeshaft, 1995; Shapka, 2009; Travis, 1993). There has also been a desire to develop schools for Black males (Hopkins, 1997) to provide positive learning opportunities.

While there is significant research that addresses rationale (Warrington & Younger, 2001), student achievement (Lee & Bryk, 1986; Malacova, 2007), and implementation (Parker & Rennie, 1997, 2002) of single-sex schools, there has been an ongoing debate questioning the validity of single-sex schools. Feminist scholars position themselves on both sides of the spectrum stating, on one side, that it upholds discriminatory practices thereby marginalizing girls (Salomone, 2004) while the other side views it as a much needed opportunity to provide girls the adequate leverage to compete academically in male dominated subjects (Stabiner, 2002; Thompson, 2003). The American Civil Liberties Union (ACLU) argues that single-sex schools do not provide equality for all genders when advantages are given to boys over girls or girls over boys (Migdal, Martin, Lewis & Lapidus, 2008). Black scholars and historians are divided on the significance of single-sex schools because some argue that they essentially function to resegregate public schools (Soderman and Phillips, 1986; The Abell Report, 1991) while others feel that schools that are designed to focus on a single-sex will help produce academic and social leaders in the Black community (Hopkins, 1997). Hopkins (1997) cites scholarship by Dr. Kenneth Clark, noted psychologist, who deemed that single-sex schools place emphasis on ‘otherness’ and impoverishes the students through segregation practices.

With a noteworthy history and struggle, researchers have provided a variety of arguments for and against the existence of single-sex schools in public educational spaces. The missing component from the research is the narratives of those that work in and attend single-sex schools.

Purpose of the Study

The purpose of this study was to examine the single-sex urban school initiative and how these schools purport to address the academic identities of its students based on the learning environment and single-sex learning environments compare to similar coeducational environments. This research is necessary due to the lack of empirical data that provides substantive support in favor or not in favor of single-sex schools in urban districts across the U.S. This study will shift focus from assessment outcomes to pedagogical practices and student narratives. The empirical data, regarding single-sex research, was inconclusive primarily because it focused on standardized assessment outcomes only rather than include the pedagogical practices of teachers and the curricula to determine if they were utilizing instructional methods unique to the gender of the students (see Spielhofer, Benton, and Schagen, 2004; Van de gaer, Van Damme, and De Munter, 2004; Younger and Warrington, 2006). Finally, narratives of the experiences of these students did not provide a significant contribution to many of the studies that were conducted (see Sullivan, Joshi & Leonard, 2010; Warrington and Younger, 2003).

Research Questions

The following questions guided this study:

1. What are the pedagogical practices of teachers in single-sex schools?
 - a. How do these pedagogical practices differ for teachers in co-educational schools?
2. What narratives do the students have regarding their experiences in a single-sex school?
 - a. How does the experience of attending a single sex school inform/shape their academic identities?
 - b. How do these academic identities compare to similar students in co-educational schools?

Importance of the Study

As the trend for single-sex education grows, there continues to be a lack of empirical data that provides insight to best practices and implementation strategies. Further, research must be conducted to determine the effectiveness of the single-sex educational model. Hubbard and Datnow (2005) note that qualitative studies “are likely to yield a deeper and more complete understanding of these [single-sex] schools” (p. 118). Additionally, Bracey (2007) suggests that “sound definitive research has to be used to guide educators and policymakers” (p. 22). Therefore, this study will continue the research conversation regarding the implementation of single-sex schools and their effectiveness.

Another consideration regards the usage of brain-based research that outlines a variety of teaching methods for educators to use when teaching boys and girls specifically. Gurian and Stevens (2011) and Sax (2005) offer such ideas as talking louder

to boys and softer to girls during instruction, or the notion that boys are abstract thinkers versus girls who are more concrete thinkers, or that boys should be given things to help them release tension. Sax (2005) specifically notes that if a boy does not adhere to what is perceived to be male oriented activities and thinking, that he should be disciplined.

This particular line of research and rationale for gendered educational spaces has created some tensions amongst researchers. Hubbard and Datnow (2005) specifically note that “studies of single-sex schools generally have not examined the larger social, economic, and cultural context of students lives” therefore “we know little about the relationships between school context, family background, and academic achievement in these settings” (p. 118). Therefore, it becomes essential to expand the research paradigm and consider alternative methods of analysis for future implementation, such as Culturally Relevant Pedagogy, which may assist with the development of best practices for instructors of urban students.

Delimitations of This Study

For this study, I specifically selected students that were in the sixth grade during the 2010-2011 academic school year. This population represented the inaugural class for the two single-sex schools. Additionally, all teachers had a minimum of five years of teaching experience.

Limitations of This Study

When designed, my goal was to observe 4 teachers in each school building and capture the experiences of 30 students (10 for each building). Teacher participants were

closer to my initial intent with seven permitting me to observe their classroom and interview them. However, the total number of student participants was very low. I mailed 417 recruitment letters to the entire seventh grade class during the 2011-2012 academic school-year at each school (126 to the boys' school, 170 to the girls' school, and 121 to the coeducational school respectively). I received a total 14 forms (5 from the boys' school, 6 from the girls' school, and 3 from the coeducational school respectively) from parents that agreed to permit their child to participate in the study. Further, when I made contact with those that agreed to participate in the study, two parents from the boys' school and two parents from the girls' school never returned my phone calls and were therefore eliminated from the study. The coeducational school presented more difficulty. When I contacted the parents, one parent asked for monetary gifts to allow her daughter to participate in the study and the other parent had experienced a major death in her family and we were never able to coordinate a time for me to interview her son. Therefore, these two study participants were eliminated leaving only one student that was willing to participate in the study. In retrospect, there should have been multiple mailings to yield a greater number of potential participants. Furthermore, a follow-up letter may have reminded potential participants that they could still participate in the research study.

The parents of the students that did participate were very invested in the academic outcomes of their child and were committed to finding what they perceived to be the best environment for their child. Therefore, this sample will give me a student perspective that includes a supportive familial background. Additionally, the parents are actively involved with the schools at varying levels. All expressed that they go to school whenever they

feel that teachers are not maintaining the best interest of their child or they want develop connective relationships with the school. What is missing is the perspective of students that do not have this supportive background. Additionally, most of the students used for this study were excelling in their respective school. Therefore, multiple perspectives from students at different levels of achievement were not captured. Finally, these groups of students were not subjected to disciplinary actions for behavior that was deemed disruptive. While one of the students at the all boys' school did disrupt classroom learning, it was not to the point that he was removed from class. It would have been ideal to work with a continuum of students that ranged from those that experienced difficulty to those that experienced excellence. It would have also been helpful to work with students whose parents presented alternative perspectives of the schools. Each parent was satisfied with the level of education that their child was receiving as well as the general environment of the school.

This sample size does not allow me to provide a complete portrait of identity because it is not representative of the student population. The sample size represents the perspective of parents that are invested in the academic outcomes of their students and by students that are for the most part invested in their own educational outcomes. This sample does not provide a continuum of specific students that are represented in the schools.

I did not have full permission from all teachers in the building to enter their classrooms, therefore I was not able to capture the full experience of students, especially those that were interviewed. The subject area courses that I observed were not consistent

across the board. At the boys' school, I observed a social studies course, a Spanish course and a computer technology course. At the girls' school, I observed a math and science course and a mathematics course. At the coeducational school, I observed a language arts course and a mathematics course. Therefore, I had to make inferences based on the instruction and not comparison of how specific subject material was delivered across the curriculum between the teachers in the different buildings. Also, I was limited to classroom observations in the girls' school, which did not help me develop a full portrait of the school. I relied on observations, interviews, and field notes to capture the experiences of the students and to develop a portrait for the school.

Finally, as a Black male and former teacher educated in urban public schools, I may have come to this project with some bias as I am invested in determining best practices and methods to help develop the outcomes for urban students in general and Black boys specifically.

Definitions of Terms

The following were terms used throughout the study. To ensure clarity, these terms are defined below in relation to their use in the study.

Coeducational School. Refers to a school that serves boys and girls in its general student population.

Culturally Relevant Pedagogy. Is a pedagogical practice that endeavors to change the status quo mentality by encouraging teachers to seek academic success, cultural competence, and help students develop a sociopolitical consciousness.

Lottery School. Schools that admit based on random drawings. Parents must register their child or children to be a part of the lottery school system. Spots are filled randomly on a first come first serve basis dependent upon the space available.

Portraitist. Refers to the researcher conducting the study.

Portraiture. Research methodology that looks to capture “the good” that exists in schools while identifying areas for further development as potential as opposed to failure.

Single-Sex School. This refers to a school that admits students based on gender (i.e., male or female students) and specifically serves boys or girls, but not both. The term single-gender is used interchangeably with single sex schools.

Urban School. Refers to a school that is a part of a district that serves a metropolitan area with a population of 100,000 or more residents.

Overview of Study

In Chapter One, I present the problem and some of the relevant research that provides a foundation for the analysis of single-sex education. Chapter One also contains the relevant research questions, rationale justifying the necessity to conduct research of this nature, definition of key terms and limitations and delimitations of this study.

Chapter Two provides an overview of relevant research on single-sex education and presents multiple arguments that offer differing points of view. Additionally, a review of brain science’s impact and controversy on single-sex education as well as relevant empirical studies regarding single-sex education and a brief overview of single sex education in the US and the legal cases that were presented to challenge its implementation after the development of Title IX legislation are included. Chapter Two

also includes the methodological and theoretical frameworks that guided this research. Chapter Three provides an overview of the methodology, research design, participants, data analysis and collection procedures, and the identification of my role as the researcher. Chapter Four presents the findings and the relevant themes, as they relate to the literature, that emerged from the data analysis and Chapter Five continues the discussion of the findings in relation to the relevant literature and the research questions. Chapter five also provides implications of this study and suggestions for future research.

Chapter 2: Literature Review

This review of literature identifies research that focuses on the single-sex schooling model. While there is an extensive amount of research regarding the single-sex school, the results rely on standardized testing and do not provide adequate narratives of the students who attend single-sex schools. Based on these studies, there is a need for further research that includes participant narratives to understand if single-sex schools are accomplishing the goals that provide the rationale for these schools and the development of the curriculum used in these schools.

The review is organized into six distinct sections: 1) a brief historical account of single-sex schools in the U.S.; 2) brain-based research that support the notion that girls and boys learn differently; 3) empirical research that has examined single-sex education at various levels; 4) analysis of the challenges single-sex schools have faced over the last 40 years; 5) gaps in the literature and relevant research questions for further analysis; and 6) the identification of the methodological and theoretical frameworks guiding this study

While single-sex schools have provided a great deal of analysis by seasoned research scholars, they have ignored the stories of the individuals that attend or have attended these schools. Therefore, this review will provide a thorough examination of the functionality of single-sex schools while engaging the desire to develop portraits that

capture the experiences of faculty and students in the schools. My overall objective is to understand single-sex schools from the perspective of the attendee (i.e., boys and girls in an urban school district) as well as the pedagogical practices of the teachers. I begin this review with a brief historical overview of single-sex schools in the U.S.

The Foundation of Public Single Sex-Schools in the United States

Single-sex schooling has an extensive history that dates back to 1635 and has been reserved, in many cases, for White males (Otto, 2004) and affluent members of society (Brown, 1999). Eventually, all girl schools were created to address the exclusion of females from the “halls of learning” (Otto, p. 353). Additionally, Brown and Russo (1999) note that in large cities, middle-class parents used single-sex schools as a preventative measure to preclude their daughters from mingling with poor boys.

However, by the beginning of the 20th century, the number of single gender schools in the U.S. began to decline significantly (Brown & Russo, 1999) due to the enactment of the 19th Amendment in 1920, which granted women full citizenship rights (Boston College Law Review, [BCLR], 2008). Additionally, as a result of the passage of this amendment and an effort to reduce possible discrimination based on sex in education, by the second half of the twentieth century, nearly all public schools became co-educational (BCLR, 2008).

Even with the decline of single-sex schools in the U.S., school districts were able to develop and operate single-sex learning spaces. However, in 1972, Title IX legislation prevented sex discrimination in any educational program or activity receiving federal funding (Brown & Russo, 1999). Sullivan, Joshi, and Leonard (2010) note that this

legislation “led to the virtual extinction of publicly funded single-sex schools” (p. 9) in the U.S. Shortly after Title IX became law. Salomone (2004) states that school officials and researchers became concerned about the underclass and the growing achievement gap between White students and Black and Latino students. As such, many schools began experimenting with single-sex configurations to address this growing problem. However, the ACLU and concerned parents were diligent in their efforts to prevent all forms of discriminatory practices in education. Brown and Russo (1999) identify five major lawsuits from 1976-1991 to “demonstrate the legal evolution of single-sex schools in the courts” (p. 150). I will discuss these cases in the challenges in single-sex education section.

Presently, single-sex schools are becoming a growing trend in U.S. public education. On October 25, 2006, the U.S. Department of Education published new regulations that made it easier to operate public schools that admitted students on the basis of sex (BCLR, 2008). The stipulation was that there would need to be an option for both sexes in regards to gender specific schools (BCLR, 2008). Therefore, if a school district opted to open an all-boys vocational school, they would be required to offer the same in an all-girl format or provide a co-educational space that offered the same types of programs (BCLR, 2008). While this may be a positive development for single-sex school supporters, there are still a significant number of challengers that consider this a civil rights violation who argue that it “undermines equality” (Salomone, 2004, p. 72) and the notion that these schools represent “subordination and inferiority” (Salomone, 2004, p. 73).

Brain-Based Research's Impact on Gender Education

Since the modification of Title IX in 2006, there has been tremendous growth of single-sex schools. Interest has especially piqued in urban school districts that are seeking alternatives that will enhance the academic achievement of students of color.

Unfortunately, as this chapter will inform, much of the empirical data is inconclusive and does not provide pedagogical practices that are effective. However, many schools, especially urban schools, have relied on brain-science research that suggests that boys and girls learn differently and outline teaching strategies to address these differences.

Brain Based Research

The difference between males and females has always been a source of debate in popular discourse. Brain-based researchers note that there is marked difference between the two (Cahill, 2012; Gurian & Stevens, 2011; Sax 2005). In 2005, this debate regarding the differences was displayed internationally when then Harvard University President, Lawrence Summers, suggested that differences between male and female brains may be a contributing factor to the lack of women in science fields (Cahill, 2012; Sax, 2005).

While this assertion led to a number of discourses regarding brain differences in men and women, brain-based researchers reveled at the opportunity to support this claim with valuable information that could assist with the development of courses and teaching strategies to change this ideology. As the leading authorities of brain-based development in boys and girls, Gurian and Stevens (2011) and Sax (2005) utilize neurological research to support their assertions. Gurian and Stevens (2011) note that chemical differences, hormonal differences, functional differences and differences in emotional processing

contribute to differences in learning, among other things, between girls and boys. They then identify each major component of the brain and identify how they are similar and different amongst males and females. Sax (2005) further contends that the brain of males and females are organized differently.

Developing a Brain-Based Single-Sex Classroom

The purported differences between the brains of boys and girls helped researchers develop a series of pedagogical strategies to support the specific learning needs of students based on gender. Gurian and Stevens (2011) note that middle school is the opportune time for the introduction of single-sex schools due the onset of puberty and the increase in both males and females. They posit that single-sex options are good because “psychosocial stresses are removed” from the learning process (Gurian & Stevens, 2011 p. 210). They further state that this removal eliminates the imposition of culturally imposed stressors for boys and girls. Sax (2005) notes that coeducational schools do not adequately attend to the specific learning needs of boys and girls because they learn differently. Sax (2005) further notes that placing boys and girls in a coeducational school is not the most normal nor it is the healthiest thing for parents to do. He notes that this may promote “maladjustment to life” once the child leaves school (p. 247).

Gurian and Stevens (2001) suggest that single-sex schools should incorporate character development, methods to incline boys to literacy and girls to mathematics and science, and discipline. Sax (2005) offers a variety of suggestions for teachers such as indicating boys do well under stress and that girls should not be given time limits and that boys should receive strict discipline while discipline for girls should be more empathetic.

Controversy With the Brain Science Method

While Gurian and Stevens (2011) and Sax (2005) have received support from the education community, policymakers, and parents, their stance on brain function in boys and girls and the differences between cognitive development has been scrutinized by educators and neuroscientist that feel these differences between boys and girls are exacerbated. Eliot (2009) notes that many of the notions regarding brain science are not supported by neurological research and some are blatantly false. Gurian and Stevens (2011) and Sax (2005) have detailed a variety of differences in brain components, such as the hippocampus, hypothalamus, and cerebral cortex and how it is different in boys and girls. Eliot (2009) specifically states that much of their research is “extrapolated” from single research studies or research that has been done on rodents (p. 8). The American Civil Liberties Union (ACLU) (2008) notes that the research of Gurian and Sax promotes gender stereotypes in schools. While Gurian and Stevens (2011) and Sax (2005) focus on the how the brain is inherently different between boys and girls, which establishes the differences in learning, Eliot (2012) notes that differences between boy and girl brains are small but become amplified by the “gender-infused culture” (p. 14). Eliot (2012) further notes that how a child develops and how the adults enforce gendered roles around them determines how they may function, thereby suggesting that the manner in which boys and girls learn must consider cultural inferences.

Form and Function: Empirical Examinations of Single-Sex Education

The body of research that analyzes the structure and function of single-sex schools has, by in large, been conducted in countries outside the U.S. This is problematic

for new single-sex schools being established in the U.S. because there is limited data that captures the voice, pedagogical practices and/or standardized testing data used to examine school performance and student outcomes. Additionally, the schools used as the unit of analysis in the empirical data are not representative of the schools (i.e., those located in urban districts serving diverse student populations) that are currently implementing single-sex schools and instruction. This dilemma is due to Title IX legislation that contributed to the near extinction of single-sex schools in the U.S., thereby making it difficult to research single-sex public schools (Sullivan, Joshi & Leonard, 2010). Conversely, the research on single-sex schools in the U.S. has been reserved for the private and parochial school population (Sullivan, Joshi & Leonard, 2010). Therefore, this review of empirical research primarily focuses on single-sex research from other countries. This review will discuss research based on: 1) teacher implementation; 2) single-sex classes in co-educational schools; 3)) comparison of single-sex versus co-educational schools; 4) academic achievement: and 5) urban schools.

Implementation and Structure

The drive to find pedagogical practices that improve student success motivates schools districts to continually seek methods that can provide better achievement outcomes. Parker and Rennie (2002) specifically sought to understand the implementation process for gender-inclusive instructional strategies in high school classes and to determine if these gender-inclusive practices were more readily effective in a single-sex or co-educational classroom. A total of 26 science teachers from western

Australia were used during nine-centrally organized professional development sessions. Parker and Rennie (2002) draw on a series of data sets based on qualitative data from the teachers' perception, triangulated data from quantitative and qualitative data from the students' perceptions, and ethnographic data gathered in classrooms visits. They found that single-sex classrooms provided better opportunities for teachers to provide gender-inclusive instruction, particularly for all-girls classrooms, as opposed to the co-educational classroom setting.

Warrington and Younger (2003) focused their research on the ways in which English co-educational schools introduced single-sex teaching. They examined 48 schools in England that introduced single-sex classrooms to improve the achievement of working-class boys through quantitative test data and interviews of teachers and students. Their findings suggest that there was no clear consensus regarding the implementation of single-sex schools. They note that some schools only implemented the change over the course of a quarter whereas others continued the instructional pattern over the course of several years. Boys, in general, resented being placed in a single-sex classroom. However, they note that teachers felt the environment helped the boys become more engaged in the learning process. Overall, they yielded no significant findings to support the implementation of single-sex schools.

Single-Sex Classes in Co-educational Schools

As schools work to find methods to improve achievement levels, they often implore new and innovative strategies to help students succeed. Wills, Kilpatrick, and Hurton (2006) examined the social and academic outcomes of students in a Tasmanian

co-educational government primary school. They used an ethnographic case study methodological approach. They selected a government school located in a rural/urban community because single-sex classes had been a focus within the school for two years. They found that there were considerable benefits, for both boys and girls, in their overall academic achievement, behavior, social skills, and attitudes about school among other things. In particular, they note that girls made advances in the areas of self-assurance and confidence and boys made gains in self-discipline and engagement in regards to school work.

Wills (2007) conducted further research with the Tasmanian government co-educational schools. The research sites involved multiple schools in socio-economically disadvantaged areas. This ethnographic study was conducted over a two-year period in four primary classes with 76 boys and 112 girls, with the focus of analysis being teaching practices developed to counter disengagement of primary school boys in a writing class. Wills (2007) found that the inclusion of the single-sex classrooms benefited all students because they were able to develop positive perceptions of themselves.

Younger and Warrington (2006) used a variety of questions to guide their analysis of three case studies examining the existence of single-sex classes in co-educational secondary schools in the United Kingdom. Their research considered unresolved questions regarding the measurement of enhanced learning and academic achievement in single-sex classrooms, whether the single sex-classroom improves the learning environment, the challenging of gender stereotypes in teaching, and the preconditions that must be considered to effectively implement single-sex classrooms. They found that

teachers of all the boy's classrooms dominated the discussions of pedagogical practices because they acknowledged that the boys were more difficult to teach. They also note that even with the positive claims regarding student achievement, there was difficulty supporting this notion because the results of the General Certificate of Secondary Education (GCSE) assessment showed no difference for two of the three case study groups. Younger and Warrington (2006) posit that even with the third case study group showing improvements on the GCSE, the increased level of achievement is attributed the differences the school made in the overall curriculum.

Single-Sex versus Co-educational Schools

Significant to the discussion of single-sex schools is how they perform in relation to co-educational schools. Providing substantive data favoring one learning environment over another has been difficult. Van de gaer, Van Damme, and De Munter (2004) examined the progress that boys and girls made in single-sex and co-educational schools in Belgium. They specifically sought to determine if there are significant differences for boys and girls with regard to mathematics and language achievement. Utilizing data from the Longitudinaal Onderzoek Secundair Onderwijs (Longitudinal Research in Secondary Education project) project, their sample consisted of 4131 students (1973 boys and 2158 girls), 327 classes (198 single-sex classes), 181 teachers and 53 schools (21 single-sex schools (Van de gaer, Van Damme, and De Munter, 2004). They found that their hypothesis, stating that boys and girls make more progress in single-sex classes and schools, could not be sustained. Van de gaer, Van Damme, and De Munter (2004) go on to support research that suggests boys do worse in single-sex environments (see Jackson

and Smith, 2000; Warrington and Younger, 2001). Conversely, there was no significant difference in the education of girls in the study as well.

Robinson and Smithers (1999) examined how students were able to adjust based on their attendance at a single-sex secondary school. They employed mixed methods, which yielded results suggesting that there is no significant difference between the education that occurs in a single-sex school and a co-educational school. Robinson and Smithers (1999) state that the differences that were present were attributable to good schools and not the separation of the sexes.

While the previous studies contend that there is no significant difference between single-sex and co-educational schools, Gibb, Ferguson, and Horwood (2008) concluded that there is a difference in these educational spaces in regards to the gap in educational achievement. Their study examined the effects of school type on gender differences in high school and tertiary (post-secondary) attainment. They utilized a longitudinal study of a birth cohort of individuals born in New Zealand, in 1977. The results of their study show significant interactions between gender and school type. In the co-educational schools, they noticed a significant gender gap in achievement that favored females and while single-sex schools showed a small and non-significant gender gap favoring males (Gibb, Ferguson, and Horwood, 2008). However, a significant issue with the results is the simplification of the differences between single-sex and co-educational schools. Gibb, Ferguson, and Horwood (2008) note that their evidence support claims that single-sex schools are “good academically” and co-educational schools are “good developmentally” (p. 45), but then go on to state that, “good schools are good schools” (p. 47).

Furthermore, they note that results are an “oversimplification of a complex reality” (p. 45) due to the fact that the results do not consider school type.

Academic Achievement

In all of the aforementioned research, there is a constant thread that suggests that single-sex schools may or may not provide better educational attainment for the students that attend these schools. Spielhofer, Benton, and Schagen (2004) specifically looked at school size and single-sex education to determine the best model for optimal achievement on the General Certificate of Secondary Education (GCSE) in England. Their findings suggest that the most effective comprehensive schools are those that are considered medium in size and single-sex. They note a variety of other factors that contribute to the effectiveness of the single-sex model such as parental support and background and heritage of the school.

Younger and Warrington (2002) explored single-sex groupings in a co-educational setting to determine if there is substantive evidence that supports the idea that single-sex educational practices are more beneficial to boys and girls. They utilized the GCSE to measure the performance of boys and girls from 1988-99 in an English comprehensive school that had a long tradition of single-sex classrooms. Their findings suggest that achievement levels can become higher in single-sex classrooms if teachers find opportunities to modify their teaching to benefit their students (i.e., boys or girls).

Single-Sex Schools in US Urban School Districts

As previously stated, changes in Title IX legislation has provided opportunities for public schools to develop single-sex spaces. While searching for research on single-

sex public schools, two things became apparent. First, of the published research on single-sex schools, few studies were conducted in U.S. schools. Of those studies conducted in U.S. schools, urban public schools were all but missing from the literature. Singh, Vaught, and Mitchell (1998) researched four urban public schools in Atlanta: two co-educational and two single-sex schools. They specifically sought to determine if single-sex classes would have greater impact on academic achievement and student attendance. The primary group of analysis was African American boys and girls in the fifth grade with 95-98% of the participants qualifying for free and reduced lunch in each school. They found that the boys in single-sex schools scored higher on mathematics, science, and social studies standardized tests. However, their reading scores were similar to the counterparts in co-educational schools. Conversely, the girls outperformed their co-educational counterparts and the boys in mathematics, science, and social studies. The girls performed similarly to the boys on reading measurements. Singh, Vaught, and Mitchell (1998) note that the reading test scores may have shown no significant difference because it is cumulative in nature and is less influenced by the dynamics of classroom organization. Unfortunately, the researchers did not seek additional explanations of this occurrence. Had they looked further, they would have understood that literacy has been a significant issue for urban school districts due to funding inequities, poverty, high student and teacher mobility, and lack of teacher preparation (Teale and Gambrell, 2007)

Hoffman, Badgett, and Parker (2008) conducted a 2-year study in a single-sex and co-educational environment at a large, urban southwestern at-risk high school. The

researchers used 513 ninth grade remedial students in the first year of their study and 489 tenth grade students in the second year of their study. The purpose of their study was to compare educational attainment in math and science using measurement tools such as student achievement, differences in instructional practice, self-reported efficacy, and student and teacher opinions. Through a mixed methods approach, the researchers instead found that the achievement levels in the co-educational school were actually higher. Additionally, the students expressed disdain for the single-sex schools, especially in regards to the socialization aspect. This particular study did not provide key demographic data to indicate the racial or socioeconomic status of the participants. The school consisted of 37.5% White, 33.4% Black, 22.2% Hispanics, and 6.2% Asian, Island Pacific, American Indian, or Alaskan Native. It may have helped to understand which students expressed disdain to determine if the results indicate differences amongst the races.

These studies do not provide conclusive evidence in support of or not in support of single-sex schools. The researchers did not adequately resolve data collection issues to support the existence of these schools. Furthermore, the Hoffman, Badgett, and Parker (2008) failed to differentiate the racialized perspective regarding single-sex instructional methods. Additionally, the researchers did not look at specific instructional practices to determine if teachers were meeting the needs of their students through methods such as culturally relevant teaching practices.

Challenges In Single-Sex Education

Public education in the U.S. has long history of discriminatory practices (Buchmann, DiPrete, and McDaniel, 2008; Tannock, 2008; Watkins and Aber, 2009). From the denial of education to students of color to the unequal treatment of girls in school, education has been a battleground in the pursuit of equality. Single-sex schools have endured a significant amount of scrutiny from various groups that have displayed two distinct positions regarding the existence of single-sex schools. This portion of the review will be organized based on: 1) feminist perspectives of single-sex education and 2) issues of civil rights for school attendees.

Feminist Perspectives on Single-Sex Schooling

Title IX legislation was a result of many feminist and civil rights activist petitioning the government to put an end to unequal education. The significance of this decision has been met with strong opinions about girls in schools and in sports (Langston, 2009).

While this legislation was groundbreaking for women's and civil rights activists, it complicated arguments for separate learning spaces for girls in public schools across the country. For some feminist, this was a matter of principle. Many felt that girls needed to be educated in environments that offered both gendered perspectives while others felt it was important to allow girls space to excel in male dominated subjects and activities without the pressure placed on them by males in the classroom and in their schools. Salomone (2004) states that, "single-sex schooling, while significant in itself, was a

flashpoint for more fundamental disagreements over gender equality as a legal standard, a moral principle, and a policy objective” (p. 70).

Salomone (2004) discusses in detail the conflict that exists amongst proponents and opponents of single-sex schools. She notes that proponents of single-sex schools feel that these schools are necessary to promote equality in education, but that they focus typically on the girls in regards to their academics (specifically, math, science, and technology). Additionally, Salomone (2004) posits that many proponents suggest that co-education embodies, “a subtle, but nonetheless harmful, institutionalized program of male dominance in classroom interactions, uneven teacher expectations, and attitudes that prepare students for gender-specific roles in society” (p. 72). Mael (1998) writes that feminists argue in favor of single sex-schools as solutions to gender inequities and as spaces for females to be in an environment that caters to their specific cognitive and physical needs.

The opponents of single-sex schooling utilize legal perspectives to support their position. Salomone (2004) notes that opponents rely on the *Brown v. Board of Education* lawsuit, which states, “separate educational facilities are inherently unequal” (p. 72). The opponents also argue that separation inhibits the development of mutual understanding and respect amongst males and females and that it does not provide opportunities for males and females to interact interpersonally (Salomone, 2004).

While both sides make valid arguments for and against single-sex schools for girls in particular, they do not effectively argue for the choice of the parents and the student.

Legal Proceedings

The data presented does not convey an influential case for the use of single-sex schools and that is working to the advantage of many opponents that are fighting to terminate its existence. Brown and Russo (1999) identify five significant cases that occurred over the last three decades that provide setbacks to the single-sex educational movement. In 1976, the *Vorchheimer v. School District of Philadelphia* was filed due to a female student not being admitted to an all boys public school. The court upheld the decision not to admit the student because they established the school maintained two single-sex schools that provided equal learning opportunities for the attendees. They further noted that the schools were public and students attended based on choice. In a similar case, *United States v. Hinds County School Board* in 1977, was filed to overturn the school boards decision to develop schools separated by gender. Brown and Russo (1999) noted that the school board specifically sought to create these schools as an answer to forced segregation. However, federal court deemed the schools unconstitutional and the schools were ordered to be close.

In 1991, the Detroit Board of Education was unsuccessful in their attempts to open a school specifically for Black males. In *Garret v. Board of Education of the School District of the City of Detroit*, the American Civil Liberties Union (ACLU) and the National Organization for Women (NOW) challenged the premise of these schools. Hopkins (1997) raises significant questions regarding the ACLU and NOW's involvement in the case considering the schools were targeted for African American males facing crisis and these organizations were primarily White and middle-class. The

schools were never opened, causing the Detroit Black community to question the motivation of the ACLU and NOW organizations. Brown and Russo (1999) state that there is resentment among African Americans towards organizations such as ACLU and NOW that have prevented the establishment of schools dedicated to helping students considered to be at-risk.

One of the most significant cases regarding single-sex education was the *United States v. Virginia* case of 1996, with the defendant being the Virginia Military Institute (VMI). Salomone (2004) notes that this case showed ideological differences amongst feminist due to the position that many chose regarding the decision. The Supreme Court ruled that the admissions practices of VMI were unconstitutional on the basis that the Mary Baldwin College, the states equivalent to VMI, did not provide equitable benefits for the students (Brown and Russo, 1999).

The final case never made it to court. However, the United States Department of Education became involved and disseminated a ‘ruling’ on the operation of the school. The Young Women’s Leadership Academy, often referred to as the East Harlem Girls School, opened in 1996 and was immediately challenged by the ACLU, NOW and the New York Civil Rights Coalition (Brown and Russo, 1999). Brown and Russo (1999) go on to reiterate some of the same concerns that arose in the Detroit case, in that White middle-class and upper middle class became interested in the legality of a single-sex school targeted for students of color, specifically Hispanic students.

These five cases present unique scenarios that, upon closer examination, create problems that are attributable to the racialized society at large. The first case and the VMI

case are very similar in that the courts decisions were based solely on the provision of adequate facilities of equal benefits. The first case showed that there were adequate facilities available for both genders. The VMI case had a different outcome due to the unequal facilities at each school. The other three cases are more complex because each one has a race and/or class component that overshadows the gender separation issue. In the Mississippi case, the schools were developed to manipulate the forced desegregation ruling. It can be speculated that the White men and women did not want their daughters in schools with Black boys because of the history of racial relations in Mississippi specifically and the south in general.

The Detroit and East Harlem cases were the only mentioned case that involved the ACLU and NOW organizations. Ironically, these schools catered to poor students of color and the organizations were considered to be middle-class by all accounts. This dichotomy speaks to the significance of race and class in this country. While the ACLU and NOW organizations may fight for equality, they fought on behalf of the position that continues to marginalize urban students of color.

Gaps in the Literature

Literature regarding single-sex schools provides beneficial results for specific questions such as how these schools compare to co-educational schools on standardized assessments and the educational attainment that students achieve upon graduation. However, the literature does include pertinent information regarding the development of future implementation of single-sex schools. For instance, none of the research addressed the pedagogical practices of the teachers in these schools. What is not clear in the studies

is if teachers taught the standard curriculum adopted by all schools within a similar region or if the school worked deliberately to develop units, lessons, and activities that engaged the students.

Younger and Warrington's (2002) research provided a small link to pedagogy when they briefly discussed how some of the teachers modified their teaching style according to the sex they taught. The other area of concern that is missing in the research on single-sex schools is the lack of student voice regarding their experiences with learning in the data collection process. The researchers did not examine how these schools developed the students academic as well as gender identity. The researchers focused heavily on standardized outcomes to determine the effectiveness of the school as opposed to the voices of the attendees. Further, brain science research focuses on generalized perceptions of boys and girls while discounting the influence of culture.

Methodology

Portraiture

Qualitative studies affords the researcher, or portraitist, an opportunity to shift the paradigm of traditional social science research methods to search for positive ways to inform the world (Denzin & Lincoln, 2005). Qualitative research also assists the researcher by shifting hegemonic methodologies (Mutua & Swadener, 2004) to develop new methods of presenting ethnographic data in a variety of forms (Denzin & Lincoln, 2005).

Portraiture provides the researcher an alternative method of producing data. Lawrence-Lightfoot (2005) notes that this particular research methodology developed in her attempt to capture the dynamic school culture in a vivid and imaginative way. Specifically, portraiture blends the concepts of life history, naturalistic inquiry, and ethnographic practices to assist the researcher in their commitment to the research participants as well as the contextualized depictions of the researcher participants and relevant events (Dixson, Chapman, & Hill, 2005). Lawrence-Lightfoot and Davis (1997) explain that the portraiture research process begins by “searching for what is good and healthy and assumes that the expression of goodness will always be laced with imperfections” (p. 9). Additionally they note that the researcher that searches for those things that are good will change their perception from that of a researcher on a mission, “to discover the sources of failure” (p. 9). The portraitist seeks to develop narratives that are convincing and authentic as well as provide details of the human experience (Lawrence-Lightfoot & Davis, 1997). Dixson, Chapman, and Hill (2005) note that the portraitist identifies methods used by the research participants to, “meet, negotiate, and overcome challenges” (p. 18).

Portraiture identifies five essential aspects: context, voice, relationships, emergent themes, and the aesthetic whole. Context specifically details the setting with the use of historical, cultural, and geographic data. Lawrence-Lightfoot (1997) proposes that context is the map used to place people and action in a particular time and space for clarification of what is done in that space. Voice incorporates the researcher in the portrait and tends to reflect the portraitist as opposed to the subject. Lawrence-Lightfoot

(1997) identifies several components of voice necessary to the development of the portrait. They are voice as witness, which gathers details about the subject and site from a peripheral point of view, voice as interpretation, which is the researchers attempt to make sense of the data collected, voice as preoccupation, which refers to the specific lens used to see and record reality, voice as autobiography, which involves the incorporation of the researcher to the study, and voice as dialogue, which allows the portraitist to place themselves in the middle of the action. Relationships details the method portraitists use to construct and develop relationships. Emergent themes are the initial attempt by the researcher to develop insight and interpretation of the data, and the aesthetic whole addresses the tensions that arise when the portrait is developed. Specifically, the aesthetic whole focuses on the blending of art and science and the description of the data with the portraitist's interpretation of the data.

Theoretical Framework

Culturally Relevant Pedagogy

Scholars have developed a variety of conceptual frameworks to push the imagination of urban teachers and instructors (Brown, 2009; Gay, 2010; Irvine, 2003; Sleeter, 2005). Each provides a significant contribution outlining strategies and practices that are important to urban educators. For this study, I utilize culturally relevant pedagogy, which Ladson-Billings (2009) notes is a particular style of teaching that “uses student culture in order to maintain and transcend the negative effects of the dominant culture” (p. 19). Ladson-Billings (1995a) posits that culturally relevant teaching is, “a

pedagogy of opposition that is committed to collective empowerment” (p. 160). Central to this particular pedagogical practice are three tenets that focus on academic success, cultural competence, and critical consciousness (Ladson-Billings, 1995a). Ladson-Billings (1995a) identifies these tenets as follows:

- 1.) Academic Success – requires that teachers attend to students’ academic needs, not merely to make them “feel good.” The trick of culturally relevant teaching is to get students to “choose” academic excellence. Students must develop academic skills. The way those skills are developed may vary, but all students need literacy, numeracy, technological, social, and political skills in order to be active participants in a democracy. (p. 160). Academic success is about student learning as opposed to student outcomes. (Ladson-Billings, 2006)
- 2.) Cultural Competence – requires that students maintain some cultural integrity as well as academic excellence. Culturally relevant teachers utilize student’s culture as a vehicle for learning. (pp. 160-161)
- 3.) Sociopolitical Consciousness – culturally relevant teaching does not imply that it is enough for students to chose academic excellence and remain culturally grounded if those skills and abilities represent only an individual achievement. Students must develop a broader sociopolitical consciousness that allows them to critique the cultural norms, values, mores, and institutions that produce and maintain social

inequities. In class, students are expected to engage the world and others critically. (p. 162)

This particular practice of teaching is regarded as an essential component for teachers of African American children, but can be an effective model and can give critical insight for teaching that occurs in single-sex urban schools. Milner (2011) notes that Culturally Relevant Teaching the teachers move students beyond where they consume knowledge to spaces where they critically examine it. Lipman (1995) further contends that Culturally relevant teachers build upon students' experiences to assist with the acquisition of new knowledge.

This particular framework will serve to not only determine how teachers commit themselves to the overall achievement of their students, the students' maintenance of cultural integrity, and their development of a critical and social conscious, but it can also becomes a template to determine how teachers are able to (or not) incorporate gendered pedagogical practices. This framework will also provide tools to analyze students' perceptions of their teachers' responsiveness to their learning and how they seek to enhance what each individual child brings with them to the classroom. Ladson-Billings (2009) contends that culturally relevant pedagogical practices seek to, "empower students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes" (p. 20). What I will specifically look for is how teachers use what students know and bring with them to class to promote academic success, cultural competence, and a sociopolitical consciousness.

Framing Theory for Single-Sex Education for Boys

As of the writing of this dissertation, there is no singular theoretical framework that specifically examines single-sex education. However, to assist with the development of a relevant theoretical framework, Fergus and Noguera (2010) implored theory of change to develop two theoretical frameworks that guide the design of single-sex schools for Black and Latino Boys. They note that single-sex schools 1) understand and know the social and emotional needs of Black and Latino boys and 2) understand and address the academic needs of Black and Latino Boys (pp 6-7). In regard to understanding and knowing the social and emotional needs of Black and Latino boys, they outline the following three objectives:

1. Need to change boys' ideas of what is a man and Black or Latino Male – the school would nurture an identity in which boys embrace activities that they may perceive as feminine and shift their focus away from masculine identity centered on sexual prowess.
2. Need for an academic identity as part of social identities – the importance is to establish “brotherhood” among their students to instill resilience to develop and sustain their emerging academic identities.
3. Need for future and leadership – expressed through identity work that begins the work of transforming Black and Latino Boys into “leaders” (Fergus & Noguera, 2010, p. 6)

In regard to understanding and addressing the academic needs of Black and Latino boys, they outline the following four objectives:

1. Gaps in academic skills – in order to provide the boys with “rigorous” or “challenging” education that will help them succeed, the schools are first teaching boys the ‘basics’ or filling in necessary skills students are lacking.
2. Preparation for college – in order for students to access college, they must have an opportunity to be exposed to a rigorous curricula, high-quality teaching, stable school environments, and college information.
3. High academic expectations – students must given work that will make them competitive with other college-bound students.
4. Relevant curriculum and instruction – instruction that connects to students’ cultures or current lives, was conceptualized as a remedy for the deficits in Black and Latino males’ education. (Fergus & Noguera, 2010, p. 7)

Fergus and Noguera (2010) developed these objectives from a longitudinal research study that included seven single-sex boys’ schools with students’ ages 9-18. This theoretical framework will assist in developing a portrait of the boys’ school.

Critical Urban Pedagogy for Girls

Evans Winters (2005) examines how family, community, and school contribute to the educational resiliency of African American girls in urban schools. She defines resiliency as “the ability to recover from or adjust to problems, adversities, and stress” (p. 20). Evans-Winters (2005) three-year ethnographic study suggests that teachers in urban schools must utilize Critical Urban Pedagogy to help girls develop resilience to overcome

obstacles and experience success in urban schools. She defines Critical Urban Pedagogy as one that examines individual and institutional themes of racism, sexism, classism, and heterosexism. She further contends that this form of pedagogy extends beyond multicultural education and seeks to appreciate the abundance of resources in girls' immediate context as methods to buffer adversity. Evans-Winters (2005) also contends that this pedagogical practice questions, critiques and challenges injustice that urban students experience. Finally, Evans-Winters (2005) suggest that in order to determine the expectations of a democratic society teachers must understand the historical, political, and economic struggles and triumphs that represent the students they teach.

Evans-Winters (2005) notes that Black female adolescents are absent from the literature because: 1) Black females have fewer behavioral problems than Black boys, resulting in reform efforts focusing on Black males, 2) White women have dominated the women's movement resulting in research being conducted on themselves and White adolescents, and 3) the tendency by researchers to assume that White females and Black females have similar socialization processes (p. 9). As a result, Evans-Winters outlines the following components of Critical Urban Pedagogy for teaching Black girls.

1. Cultural Context of the Student –learn where the student lives, and how they live. Evans-Winters suggest that teachers enhance their levels of comfort and challenge their perceptions. She also encourages the development of alternative teaching and learning techniques and the examination of social constructs of gender and its patriarchal roots. She suggests that teaching about gender should not be conformed to a

single day, but rather the teacher should be committed to the eradication of sexism and racism in all forms (pp. 157 – 158)

2. Developing Gender Specific Programs – Teachers must commit to developing programs that discuss teen sexuality, media images of women and Black girls, hygiene and health, conflict resolution, and community responsibility. She notes that teachers can develop after school programs to address these issues. Teachers promote educational persistence by developing and implementing programs that meet urban girls' social, educational health, and emotional needs (pp. 159-163).
3. Self-Determination – Evans-Winters suggests that teachers must help students develop the freedom to determine ways they will be governed. She suggests that teachers should involve students in the education process as participants as opposed to recipients (pp. 163-164)
4. Self-Reflexivity – Teachers must examine their own assumptions about ability, race and gender. They must actively reflect on racist and sexist beliefs to determine how they inform the structure, pedagogy and interactions present in their classroom (pp. 167-168).
5. Cultural Aesthetics – Teachers must bring art that represents the students and embraces the physical and mental presence of their students. Teachers must help students learn such things as the dominant discourse while retaining their linguistically diverse

language form. Teachers are also suggested to use humor to not take words and actions too seriously. The implication is that humor will help decrease student to student and teacher to student tensions and animosity. Humor is also stimulating and anecdotal. Additionally, she notes that schools must incorporate the style and fashion of the students through their expressions with their clothing (pp 169-173).

Unlike Fergus and Noguera's (2010) development of framing theories for the structure of schools that attend to the educational needs of Black and Latino boys in single-sex schools, there is no framing theory for the education of urban girls in the single-sex context. Therefore, I will employ Evans-Winters' (2005) use of critical urban pedagogy to assist with the development of the portrait for the girls' school.

Chapter 3: Methods

This chapter provides an overview of the research methodology and includes the research design, participant information, procedures used to collect and analyzed data and the identification of me as the researcher.

Research Design

Due to the overemphasis of standardized assessment measures in the empirical research, this qualitative study will focus on an all-boys' school, an all-girls' school, and a comparative coeducational school through the use of portraiture. The qualitative approach seeks to determine how a variety of components within the school work to create a whole picture whereas the quantitative approach tends to focus on a specific component (Merriam, 1998). Furthermore, qualitative research looks at the experience of the participant as it is lived (Merriam, 1998). This particular methodology will allow me to use observations, field notes, and interviews to understand the experiences of the students and teachers in these schools. Specifically, I will investigate the identities that the students develop based on their experiences as well as the pedagogical practices of the teachers and their curriculum. Accordingly, academic achievement will be a unit of measurement. However, the goal is to use student achievement in relation to their daily academic outcomes as opposed to standardized assessment measures.

Portraiture is a natural methodological tool because it allows the researcher to interpret action, perspective and discourse in context of its natural environment (Lawrence-Lightfoot and Davis, 1997). Additionally, the researcher or portraiture becomes intimately involved with the development of the narrative as they try to express and identify the goodness while documenting the participant's perspective.

Research Setting

Central City¹ is a large, eclectic mid-western urban city that is anchored by Fortune 500 companies and a variety of colleges and universities that include, but is not limited to, R1 public, private, religious affiliated and technical and community. According to 2010 census data, there were 787,033 residents in the city and 1,836,536 in the greater metropolitan area. The median salary and property value in Central City is \$41,370 and \$119,648 respectively. Central City has the largest school district in the state with a current enrollment of 52,851 students with 77.3% qualifying for free and reduced lunch. Table 3.1 outlines the racial demographics of the district compared to Central City proper.

¹ Pseudonyms were assigned to all participants and relevant places to protect their anonymity. The source of data relevant to Central City has been omitted to maintain the anonymity of the research participants.

Table 3.1. Central City Population Demographics vs. Central City School District Student Demographics

Race	Percent in the City (%)	Percent in the District (%)
Black	28.0	60.0
White	61.5	27.2
Hispanic	5.6	6.1
Asian	4.1	1.9
American Indian	0.3	0.2
Other	0.2	4.6

During World War I, Central City saw an increase in number of Blacks migrating to and through the city in search of jobs in the steel and factory industry. Blacks who settled in Central City lived in a variety of locations. However, after the war when Central City experienced a real estate boom, a variety of restrictive covenants, deeds, and zoning patterns were designed to maintain racial homogeneity. During that time the city established the Auburn area located east of downtown. The area was vibrant with a population that represented working and middle class Blacks.

As recently as 1977, Central City Schools remained essentially segregated. Central City circumvented the *Brown v. Board* ruling of 1954 by developing city boundary methods that created neighborhood schools for segregated areas and thereby reinforced racial separation. The 1977 court case that was filed against Central City

Schools sought to overturn the discriminatory boundaries the real estate developers established in an effort to maintain homogenous neighborhoods in the annexed areas of Central City. The petitioners were able to successfully argue their case and prove that the schools were segregated by neighborhood, and that the boundary methods used by the Central City School Board promoted this segregation. Town hall meetings held in the neighborhoods following this decision prompted the school board to develop a strategy to change the court's decision. During the 1978-1979 school year, Central City's School Board successfully petitioned the Supreme Court to prevent forced busing, the implementation strategy used to desegregate the schools. However, in 1979, the Supreme Court upheld the 1977 decision and district began busing students to various schools as part of the desegregation efforts. This decision to uphold the court's decision resulted in whites fleeing Central City and settling in the neighboring suburbs. As a result, many Central City schools closed due to decreased enrollment. The student population declined drastically with each school year. In 1971 Central City boasted a student population of 110,725; today the student population is less than half of that total.

Changes in Central City Schools

In December of 2009, a committee of community leaders and Central City school administrators recommended to the school board that the district close nine under enrolled schools, five elementary buildings and four middle school buildings, and re-align district feeder patterns to consolidate the schools that were to remain open. The school board approved this recommendation and schools were re-aligned accordingly. Due to the consolidation and re-alignment, the district utilized two of the closed middle

schools and opened a new boys' school and a new girls' school. In August 2010, the two new schools opened their doors for their inaugural 6th grade classes with the goal of adding a new 6th grade class each year. Currently, each school has a 6th and 7th grade student population.

The State Board of Education govern the Central City District and has created a variety of measures to help determine how the district and individual schools within the district are performing. Each year, the SBE assigns a rating based on quantifiable measures such as benchmark and graduation assessments, student attendance, and graduation rates; Ranking from highest to lowest the ratings are excellent with distinction, excellent, effective, continuous improvement, academic watch, and academic emergency. The Central City school district has a rating of continuous improvement; the three schools used in this study, Scholar Academy for Boys, Excelsior Preparatory School for Girls, and Pride Alternative Middle School, received a rating of continuous improvement, excellent, and continuous improvement respectively. Table 3.2 provides an overview of the district and the three schools for this study with regard to teacher and student characteristics as well as results of the state assessment across the schools and in comparison to the district as a whole.

Table 3.2: School Characteristics 2010-2011 School Year

		Central City Schools	Scholar Academy For Boys	Excelsior Preparatory School for Girls	Pride Alternative Middle School
Overview	Grades Served During 2011-2012 (Expanding)	PreK-12	6-7 (6-8)	6-7 (6-8)	6-8
	Open Enrollment or Lottery (Admission Process)	Open and Lottery	Lottery	Lottery	Lottery
Teacher Characteristics	Number of Teachers	4700	11	11	29
	Female Teachers (%)	75.2	54.5	81.8	82.8
	Male Teachers (%)	24.8	45.5	18.2	17.2
	Teacher: Student Ratio	20:1	NA	NA	NA
	Percent by Race (%)	American Indian	0.2	NA	NA
		Asian/Pacific Islander	0.7	NA	NA
		Black/African American	21.3	36.4	45.5
		Latino	1.1	NA	NA
		White	76.5	63.6	54.5
		Not Reported	20.1	NA	NA
Student Characteristics	Enrollment	49616 ^a	209 ^a	343 ^a	359 ^a (163 B/196 G)
	Total by Race ^a (%)	Indian	0.2	0	0.6
		Asian/Pacific Islander	2.1	0	1.7
		Black/African American	58.9	85.2	75.2
		Hispanic	6.8	2.9	5.0
		White	27	6.7	12.2
		Multi Racial	5	4.8	5.5
	Percent Special Ed (%)	17.1	18.0	9.9	13.7
	Percent Qualified for Free and Reduced Lunch (%)	81.9	77.03	78.13	82.17
	Percent Proficient on State Reading Exam (%)	68.8	69.5	87.9	67.9
	Percent Proficient on State Mathematics Exam (%)	58.3	61.0	73.9	59.0
	Percent of Males Proficient on State Reading Exam (%)	63.0	69.5	NA	62.7
	Percent of Males Proficient on State Mathematics Exam (%)	56.1	61.0	NA	62.7
	Percent of Females Proficient on State Reading Exam (%)	74.5	NA	87.9	72.2
	Percent of Females Proficient on State Mathematics Exam (%)	60.4	NA	73.9	55.6

a. 2011-2012 School Year

The single-sex schools are the primary unit of analysis. However, a coeducational school was selected based on similar academic characteristics. All schools base admission on the district lottery system, all schools required uniforms and the coeducational school has a similar student population compared to the single-sex schools.

Participant Selection

At each of the single-sex schools, I was invited to attend a faculty meeting to discuss my research study. Many teachers expressed interest in participating in the study but three teachers at the boys' school and two teachers at the girls' school followed through with the necessary consent forms (Appendix E). At the coeducational school, the principal identified teachers that he knew were familiar with culturally relevant teaching practices. Initially, three teachers agreed to participate, but one dropped out of the study because she changed buildings.

The parents of all seventh grade students in each building received a recruitment letter (Appendix C and D) and consent form (Appendix F) via mail. I specifically contacted the seventh grade students in each building because they represented the inaugural class of the boys' and girls' schools. Table 3.3 outlines the return rate of student participants.

Table 3.3. Return Rate for Student Participant Mailing

School	Total Number of Forms Mailed	Total Number of Forms Returned	Actual Participants
Scholar Preparatory School for Boys	126	5	3
Excelsior Preparatory School for Girls	170	6	4
Pride Alternative Middle School	121	3	1

Of the 417 forms that were mailed, 14 forms were returned yielding a 3% response rate for the three participating schools.

Table 3.4 lists all of the participants of this study. I assigned pseudonyms to protect the anonymity of each participant. Following the table are thick descriptions of each participant to enhance the portrait of each school.

Table 3.4. Research Participants

Participant	Gender	Ethnicity	Role	School	Years of Experience
Ms. Thacker	Female	African American	Social Studies Teacher	Scholar Academy for Boys	20
Ms. Hardy	Female	White	Spanish/STARS Teacher	Scholar Academy for Boys	30+
Mr. Draper	Male	White	Computer Technology Teacher	Scholar Academy for Boys	6
Mr. Henderson	Male	African American	Principal	Scholar Academy for Boys	20
Ms. Carlson	Female	White	Mathematics and Science Teacher	Excelsior Preparatory School for Girls	6
Mr. Mangrum	Male	White	Mathematics Teacher	Excelsior Preparatory School for Girls	17
Ms. Norris	Female	African American	Principal	Excelsior Preparatory School for Girls	30+
Ms. Bennett	Female	African American	Mathematics Teacher	Pride Alternative Middle School	17
Ms. Munson	Female	White	Language Arts Teacher	Pride Alternative Middle School	13
Mr. Ferguson	Male	African American	Principal	Pride Alternative Middle School	20
Devin	Male	African American	Student	Scholar Academy for Boys	1 st Year
Chris	Male	African American	Student	Scholar Academy for Boys	2 nd Year
Kendrick	Male	African American	Student	Scholar Academy for Boys	2 nd Year
Keisha	Female	African American	Student	Excelsior School for Girls	2 nd Year
Christina	Female	White	Student	Excelsior School for Girls	2 nd Year
Lisa	Female	African American	Student	Excelsior School for Girls	2 nd Year
Ashley	Female	African American	Student	Excelsior School for Girls	1 st Year
Jermaine	Male	African American	Student	Pride Alternative Middle School	1 st Year

Teachers

Scholar Academy School For Boys

Ms. Thacker

Ms. Thacker has a vibrant personality and is a self-described tomboy. However, that is not evident upon meeting her. She has long black hair, deep almond skin tone and a warm smile that greets her students. She typically wears dresses or a skirt and blouse combination with heels. Her classroom is very warm and inviting. She once told students that her friends call her “Big Mama” because they know they can come by her house any day of the week and she will have something for them to eat. She often bakes treats and confections for the students to give out as prizes or rewards for good behavior or remaining focused during class discussions or group work. On a couple of occasions, other teachers found out that she had made treats and came by her classroom to get one for themselves. During one observation, she made Oreo truffles and gave me one to try.

She does not fit the typical description of a “Big Mama.” In my family, for instance, “Big Mama” is someone’s grandmother, great grandmother or auntie. She is typically a heavy set woman who cooks exceptionally well and opens her door for anyone that may be in need of a nice hot meal or a warm place to sleep. Ms. Thacker is neither big nor is she old. In fact, she has been with Central City Schools for twenty years. She started with the school district immediately after college. She said that even though her student teaching experience had come to an end in December, she stayed in her building for the remainder of the year.

She is a first generation college graduate and the product of a single-family home. She uses this information to help her connect with some of her students and encourage them that they can overcome any obstacle. She is married and the mother of four: 3 boys and a girl. At her previous school she successfully developed and presented a proposal to the principal regarding the development of single-sex classes in a traditional coeducational school. Ironically, she was assigned to teach the girls in that school.

Ms. Hardy

The first time I met the staff at Scholar Academy was during a staff meeting I was invited to attend and present my study to potentially recruit participants. I distinctly remember Ms. Hardy, not because of her short dark brown hairstyle or her bright eyes. It was her kind smile and the questions she asked during the meeting that let me know she probably has never met a stranger in her life. She immediately began dialoguing with me about the research on single-sex schools and the need for studies that examine the implementation of single-sex schools. Every time I came to the building thereafter, she would greet me and ask how I was doing.

She has been an educator for nearly 40 years and began her teaching experience in Spain shortly after her graduation. She spent 18 months in Spain and often spoke about the defined roles of men and women in the country during that time period with her students. Her classroom was bursting with color and authenticity as she saved a variety of artifacts from her travels. Every time I came to her class to do an observation, she greeted me in Spanish and encouraged the students to do so as well. Aside from her teaching experience in Spain, she has been in urban schools her entire educational career.

Ms. Hardy is also the STAR teacher for the building, which replaced the traditional in-school suspension instructor. She teaches three classes during the day and the rest of her time is spent with her STARS students. On a few occasions, I heard her tell other teachers that experienced difficulty with particular students to send them to her and she will help get them on track. Ms. Hardy has a calm demeanor and students are very receptive to her. I never saw her raise her voice in frustration. It was possibly due to the fact that a lot of her instruction was done in Spanish, which required students to listen intently and respond accordingly.

Mr. Draper

Mr. Draper is an average height white male with brown hair, a neatly trimmed beard and moustache. During the school year, he became a new father. I remember during one observation, he proudly showed the students a sonogram image of his daughter. He was excited about the potential of becoming a father. However, during the fall of the 2011-2012 school year, his daughter experienced a serious crisis that required him to be out of the school. I went to visit his class one day and the substitute informed me that he was out and told me what happened to his daughter. The building was concerned. Even the students were concerned about his daughter's welfare. Thankfully, she made a full recovery. When I asked him how she was doing, he smiled and said great! He also expressed how the school had really embraced his family during this crisis and how appreciative he was of the administration, faculty, staff, parents, and students.

Mr. Draper is the technology teacher and spends a great deal of time talking to his students about choices. During one observation, he talked to the students about high

school and college and encouraged them to consider going to high schools in the district that would continue the education they were receiving at Scholar Academy. During another observation, he discussed career opportunities in the science and technology field. On several occasions, I would see Mr. Draper speaking to students one on one to help them focus their behavior and calm down. He often resolved conflicts with students by talking them through to help the student think rationally. His classroom was one of the few air-conditioned spaces in the old building. Mr. Draper has been a teacher in Central City Schools for six years.

Mr. Henderson

I initially met Mr. Henderson as the vice principal of one of lottery middle schools in the Central City School district. At the time, I was visiting schools to meet the teachers that would be supervising my assigned cohort of pre-service teachers and made it a point to meet with each of the principals for the building to establish a relationship and develop opportunities for communication regarding the development of the pre-service teachers. When I asked to meet with the principal, I was informed that I would be meeting with Mr. Henderson due to the fact that the principal was in the hospital giving birth to her child. Mr. Henderson came out to greet me and invited me to his office. He was relatively tall, well groomed and presented a very warm persona. During our meeting, he was very receptive to the idea of creating an open line of communication to assist the pre-service teachers.

Shortly after our meeting, I learned from the principal that Mr. Henderson had been pulled from the school to help develop and become the principal of a new school

specifically for boys. A year later, I went to the school prior to the start of the 2010-2011 school year to request access to the boys' school for the purpose of this research. As I walked in, I was directed to the auditorium where Mr. Henderson was prepping for the first day of school. He was professionally dressed and asked me to wait while he directed the students through their assigned tasks for the opening ceremony. I soon noticed that the school was busy with activity as volunteers were hanging posters and banners in the main entrance foyer area. I also learned that Mr. Henderson was a member of a Black Greek organization and that many of the volunteers were members of the sorority that was directly affiliated with the organization. Mr. Henderson also relies on his fraternity to provide assistance with the schools mentoring program.

Mr. Henderson is charismatic and charming as well as direct. He continually reinforces his expectations and the expectations of the school whenever he meets with students as a group or individually. His soft-spoken voice can be misinterpreted as being passive but his actions show that he is very assertive, specifically when it comes to student excellence and the support of his faculty. Mr. Henderson is often asked to speak to groups or schools about Scholar Academy and when he does, he is usually accompanied by a small group of student ambassadors to talk about their experiences in the school. Mr. Henderson knows the names of every student in the building and is very visible to the students despite a very busy schedule that includes marketing the school, discipline, teacher evaluations, meetings, and a variety of other administrative responsibilities. He is well organized as reflected by the maintenance of his office. His

desk is very organized and there are monitors that allow him visual access to various parts of the school.

Of great significance is his relationship with the faculty and staff. During staff meetings, he encourages staff to share their thoughts and opinions regarding specific methods of instruction and school programs. Additionally, he provides opportunities for faculty to discuss specific issues with students and work together to determine the best alternative for the students with the ultimate goal being the success of the student.

Excelsior Preparatory for Girls

Ms. Carlson

By the time I was given access to the girls' school, I had been in my previous sites for quite some time. I was invited to present my proposed research at a faculty meeting during the first 15 minutes. It was my hope to recruit volunteers to permit me the opportunity to observe in their classroom and subsequently interview them. After a week, I found out only one teacher had agreed to allow me to use her observe in her class.

When I met Ms. Carlson, she reminded me of the students. She had a young face and an outgoing personality. She grew up in a rural part of the state and had not been exposed to diversity of any kind until she entered college. Her lack of experience was not relevant in her classroom as she pushed all of her students towards excellence. Ms. Carlson is not much taller than her students but her voice commands their attention. It can be soft and empathetic or loud and commanding. When she raises her voice, which she rarely does, students give her their undivided attention.

When students are working diligently and quietly, she will often turn on music so that they can listen to it while they work. Often times, I would see students working and singing to the song that was playing. Ms. Carlson expressed genuine interest in what was going on with each of her students. Each time I observed her teach, I saw her talking to a different student and engaging them in various topics of conversation. I would then watch her take what she learned from the student and transform it into a math problem. Ms. Carlson has been teaching for six years and has spent the last five in Central City Schools.

Mr. Mangrum

Mr. Mangrum agreed to be a part of the study a few weeks after I began observing Ms. Carlson. Mr. Mangrum is an avid marathoner who has participated in a variety of marathons across the country. He is originally from New York and his New York accent can be heard faintly at various times during his teaching or when he is conversing with someone. He has a very short haircut and resembles a marathoner in stature and build. Prior to working in the all-girls' school, he worked in the gifted and talented office for the district.

I specifically remember Mr. Mangrum because I took a graduate class with him and I remember how the instructor acknowledged his receipt of a special award for his excellence in mathematics instruction. He spends a great deal of time working one on one with students to help them understand some of the complex topics he covers in class. He is also an advisory teacher and noted that when the girls begin discussing sensitive issues,

he feels he can handle them because he does have a wife. Mr. Mangrum has 18 years of teaching experience, with 13 of those years being in the Central City School District.

Ms. Norris

When I decided to do research on single-sex education and the development of the two new schools for the Central City School District, I made direct contact with the principals of each school to discuss the potential of doing this research at each of the sites. I encountered difficulty at the girls' school. After repeated attempts through email and campus visits to meet with the principal, I was not successful in establishing a meeting. I did not meet with or hear from the principal until my fourth visit to the school. I happened to be talking to the secretary in the opening foyer when Ms. Norris descended down the stairs from the second floor. She was an elegant middle-aged Black woman that was meticulously dressed in a black and white checked skirt suit with sensible flat shoes and a large pink flower on her lapel. When the secretary introduced us to one another, she acknowledged that she had seen my emails but that she was not interested in having an outside researcher in the school until she finished conducting research of her own.

While initially disheartening, I smiled and thanked her. Considering that I wanted to capture the portrait of both a boys' and girls' school, it felt it was necessary to push a little further. I was eventually able to meet with Ms. Norris again during the second year. This time, she was again meticulously dressed in a black dress with a pink blazer. As I sat in the main office prior to our meeting, I began looking around at the vibrant decorations and noticed a large poster of the first Black sorority prominently displayed on the wall. I would later learn that Ms. Norris is an active member of this particular sorority.

Additionally, I noticed that the sorority and the school share one their respective colors with one another; pink. During our meeting, Ms. Norris and her supervisor listened intently to my presentation. Once Ms. Norris learned that I would not be conducting interviews during school hours, she was relieved. I learned that she was resistant to my presence in the school because she was concerned about my contact with the students being that I am male and unfamiliar with the students. She also expressed concern for having to monitor the interviews that I conducted. I then saw the protective nature of Ms. Norris. She was concerned about creating an environment that was safe for her students.

Ms. Norris did ask me to focus my time in the building on classroom observations only. She felt that the other opportunities the school offered would violate student confidentiality. I agreed to her request and was subsequently invited to a staff meeting. Ms. Norris is very direct when speaking. She later told me that this was a trait she adopted while working in the coeducational school. She said that she was learning to soften her tone a bit because she is working with girls. Whenever I came to the school, I noticed that Ms. Norris was dressed professionally and usually wore pink and black in some combination. I also noticed that many of the teachers wore pink and black as well.

Pride Alternative Middle School

Ms. Bennett

Ms. Bennett is dynamic and creative. She wears her hair naturally in shoulder length dreadlocks. She has chestnut color skin and a welcoming smile and laugh. Outside of her door are copies of her undergraduate and graduate diplomas as well as two pictures of her in mime make-up dancing during a church service. In the African American

tradition, many churches have expanded their fine arts ministries to include liturgical and mime praise dancing, which is interpretive. Mimes typically select a song and create a dance based on what the song is saying. Additionally, mime dancers wear white face paint reminiscent of the mimes that people encounter in places like New York City.

Ms. Bennett has been a teacher in Central City Schools for 17 years and was a Title I teacher this school year, which required that her class size be smaller. Unfortunately, she will no longer be teaching at Pride next year due to the expiration of those funds. Her classroom is adorned with a variety of figurines and pictures that Ms. Bennett created. Her rear wall is covered with pictures of students working on mathematic problems. Her classroom used to be a science class. Her desk is a large lab station.

Pride Alternative has a school uniform in place that requires all students wear navy shirts and khaki pants. Ms. Bennett dresses similar to her students. She typically wears navy pants and a white shirt with gym shoes.

Ms. Munson

Ms. Munson has 13 years of experience in Central City Schools. Her face is very serious and her brown eyes are very attentive. Her brown hair is cut very short and tone is very direct. When I first met her, she did not smile or take her eyes off of me. She listened intently to what I had to say and responded accordingly. Her smile was one of agreement; the kind where one just pushes up their lips to indicate agreement. I initially thought she would be too serious but I soon learned that I met her teaching persona.

She displayed this same expression in class and watched every corner of her room like a hawk. She often counted backwards from five to get the students attention. If she got to one, there would be disciplinary consequences for students that were not paying attention or continued act disruptively. Ms. Munson often identified students that were doing what was expected of them. She would thank them in front of the entire class.

As I continued to observe her class, I noticed that are exchanges became warmer. I also noticed that while Ms. Munson was very serious with her students, she was also concerned about their success. During our interviews, she was always very warm and engaging and smiled genuinely as we shared information.

Mr. Ferguson

When I contacted Mr. Ferguson about using Pride as a research site, he was very warm and accommodating. He specifically sought teachers that he felt aligned with my research goals and approach. He was an average height Black male with a clean-shaven head. He typically wore dress slacks, shirt and tie with black gym shoes. Every time I came to the building, he was always on the move around the building. His primary goal was to maintain as well as exceed the longstanding academic excellence the school was known for.

Mr. Ferguson searches for new and innovative ideas to help promote excellence. Ms. Bennett indicated that when he attends meetings where they present alternative teaching strategies, he shares the information with the teachers in the building to promote academic excellence. I learned that he too was working towards his doctorate degree and that he was invested in finding opportunities of excellence. During the 2010-2011

academic year, Mr. Ferguson piloted a small single-sex project in some of his 6th grade classes. He noted that they were successful in helping the students maintain focus while in class and contributed to stronger test results on the state mandated grade-level assessment. However, he moved the pilot classes back to coeducational settings after the state assessment. He noted that it was a good experiment but he felt that it was not a good fit for the culture at Pride Alternative. He felt that if he were given the chance to design a school, he would include single-sex classes in the core academic areas and coeducational classes in the elective classes. Upon further investigation, I learned that Mr. Ferguson supported single-sex classes for core academic courses (i.e., language arts, science, mathematics, etc.) but felt that the culture of his school would not support that type of learning environment.

Student Participants

Scholar Academy For Boys

Devin

When I first met Devin, he was a very quiet and reserved in his demeanor. He reminded me of a student that often flies under the radar in that they do not make many waves in the school and are often overshadowed by the more outspoken young men. He showed great attention to his own academic success and future. This is his first year at Scholar Academy and he expressed a great deal of care for the school when compared to his previous school. Specifically, he acknowledged that, “some stuff I learned last year in middle school, I’m learning way better at this school because the teachers took time to

teach it instead of moving on.” After our initial meeting, I paid closer attention to how he interacted in school and amongst his peers. He was always focused and meeting the expectations of his teachers. One day in particular, he was doing his class work in Ms. Thacker’s class and the class had become quite disruptive with a variety of students moving around the classroom and talking to their friends. Ms. Thacker spent a great deal of time trying to keep students on task. However, to reward those that were doing their class work and following instructions, she presented them with a treat. She called the names of those that she noticed were working and following instructions and Devin was one of the students that received a treat.

Chris

What was impressive about Chris was his self-determination and courteousness. When I spoke with him, he answered every question with a yes or no sir and he paid close attention to what I asked of him and what I had to say. After meeting his mother, I understood where this came from and immediately noticed that she was very invested in his future and sought all opportunities to help him achieve. Chris, like Devin, was quiet and reserved but he was a school jock and took his sports as serious as he took his academics. During observations, he was focused on the expectations that teachers had in place and following classroom instructions and procedures. His mother was very involved with the PTO because, “it afforded her the opportunity to know what’s going on in the school and to access the teachers and principal to ensure that she is doing everything to help her son succeed.”

Kendrick

Students like Kendrick often present some of the greatest challenges for teachers. Smart but brash and very vocal about his desires regarding his school of choice. In fact, I remember him very distinctively while I was observing Ms. Thacker's afternoon class. During the class, I noted that Ms. Thacker had to constantly encourage him to stay on task, do his work, stop talking, and remain in his seat. With each reminder came a long sigh or an eye roll from Kendrick. After being told repeatedly to refrain from the aforementioned requests, he blurted out loudly, "Man, I hate this school!" By the lack of response from everyone in the class, I could tell that this may not have been the first time he verbalized his displeasure with the school. However, when I officially met Kendrick to conduct our interview, he was seemingly a different person but I soon concluded that it might have been due to the fact that we were in his grandmother's house and both his mother and grandmother were present for the interview. When I specifically asked why he did not like the school, his reply was that there are no girls at the school and that there are a lot of fights, which is in contradiction to some of the things the other students said. His mother responded that she placed him in this school so that he could remain focused and not become distracted from the girls because she felt her son was "handsome" and she did not want him to "possibly be persuaded to by the temptation of a girl." Additionally, Kendrick did express an interest in becoming a marine biologist or engineer.

Excelsior Preparatory for Girls

Keisha

When I met with Keisha, she initially was reserved in her responses to my questions and gave answers without much elaboration; she seemed disengaged from the interview. When asked what she did not like about the school, she immediately gave straight answers about things that bothered her. Primary on her list was the lack of boys. She noted that she was tired of being around girls all the time. She said the first year was okay but now she is tired of it. Her mother responded and told her that her focus should be on school and not boys. Keisha also noted that she saw more conflicts this school year between girls than last year. Her mother stated that she felt the school was good but that she would be moving Keisha next year because she wanted to expose her to other types of learning environments in the district.

Christina

Of all the interviewees, Christina was the most enthusiastic about her experience at Excelsior; she was also my only White interviewee. She noted that prior to attending Excelsior, she felt ridiculed in her elementary school for being smart and completing her work. Her parents discussed how difficult it was for her because they thought that the teachers spent more time on the behavioral issues than teaching the course content. They often sent her to school with books to read when she completed her work to keep her out of trouble, however, her teachers would subsequently comment that she was not following classroom procedure. Her parents were frustrated with her educational experience in the district until she enrolled at Excelsior. Christina notes that she has more friends and that some of the girls who ridiculed her in elementary school were now her

friends and associates at Excelsior. She no longer felt that she had to be ashamed to be an achiever in the Excelsior environment.

Lisa

A smart, engaging young lady with a broad smile, Lisa was her second year at Excelsior and she liked it overall. She expressed some concern regarding one teacher in particular but her mother noted that she resolved the issue with the teacher and things seemed to be going much better in that particular class. Lisa said that her classes encourage her to consider a career in engineering. Lisa also noted that she thought that her teachers were committed to her achievement and cared about her outcomes. She specifically noted that Mr. Mangrum really helped her understand some of the more complex concepts in mathematics and she has developed a fondness for the subject.

Ashley

Ashley was the only interviewee who was in her first year at Excelsior. She had attended a traditional coeducational school the year before and initially expressed some hesitation about going to the school because she would be away from her friends. However, she quickly made new friends and adapted to the school culture. While she likes the school and feels that she is doing much better overall in this learning environment, she mentioned that she misses boys. Her mother stated that she liked the school and despite her daughter's feelings regarding boys, she is happy she is in a single-sex school because her focus is on academics and not the boys. Her mother also noted

that she chose Excelsior because she was familiar with the principal and knew the level of expectation placed on the students in her building.

Pride Alternative Middle School

Jermaine

Jermaine's house always was buzzing with activity. His mother informed me that she had six boys. Jermaine, the third oldest child in the family, was a well-groomed, soft-spoken young man. Prior to becoming a student at Pride Alternative, Jermaine was a student in a neighboring suburb. However, due to redistricting and changes in the Central City zones, he was now required to attend school in Central City. His mother said that she cried when she found out that he had to move to Central City schools and was very hesitant to send him there, however, she did not have the financial means to move. Jermaine noted that he felt anxious about the move himself and was sad that he would not be able to go to school with many of his friends anymore. Both Jermaine and his mother said that they were satisfied with Pride Alternative and happy with his transition and overall progress in the school. His mother noted that she was considering transitioning him to Scholar Academy or a similar all boys' charter school.

Data Collection

To understand and fully capture the experiences of these students and teachers, I utilized two primary techniques to gather my data that include participant observations and open-ended interviews.

Classroom Observations

The observations are important as they provide essential data regarding the pedagogical practices of the teachers in these schools, the nature and quality of the interaction between teachers and students as well as the interaction between the students. I structured my observations in to align in the suggested guide developed by Wolcott (1981). Wolcott suggests observing broadly, looking for nothing in particular, search for paradoxes, and search for challenges facing the group. During each observation, I made general notes about the setting, class occurrences, instruction, and interactions. I also developed a column next to my observation notes to capture questions for further inquiry during the interview process or to note actions that aligned with the culturally relevant teaching.

Observations were typically scheduled to occur weekly at each site. I began observations at Scholar Academy School for boys and Pride Alternative Middle School in April of 2011. I specifically observed sixth grade classes, as Scholar Academy only had a sixth grade population. In August of 2011, I shifted my observations from sixth grade students to seventh grade students. Excelsior subsequently joined the study in late September 2011. I observed each teacher during two consecutive class periods where possible, with exception of Ms. Hardy who taught only one relevant population for this study. I spent a total of eight months (i.e., April 2011 – March 2012, excluding summers and holidays). My initial goal was to be in each school one day during the week to conduct my observations. However, scheduling conflicts, testing, special programs,

teacher absences, and in-services modified my observation schedule. Detailed descriptions of each class were included in the field notes.

Field Notes

In an effort to maintain organization of the different learning spaces that I observed, I typed field notes from my observation data. There, I chronicled descriptions of the participants, the schools, events, activities, interactions, conversations, and questions for further clarification. I also recorded my ideas about each school, my reflections of my observations and the emergent themes that began to materialize.

Interviews

The interviews for this study were open-ended to allow flexibility in the types of questions that were asked. There was general set of questions (Appendix A and B) to help guide the interview and allow the interviewee to discuss their perceptions, experiences, thoughts and feelings candidly. The questions were developed to capture general information and to provide an opportunity to talk about the pedagogical practices of the teachers and to denote where their perceptions aligned with Culturally Relevant Teaching. Each teacher participant was interviewed twice, with the exception of Mr. Mangrum who joined the study late. The interviews coincided with the observation schedule where applicable to address relevant topics regarding the experiences of the participants in relation to what is occurring in the research site. Each student was interviewed once due to scheduling issues (i.e., having to re-schedule and postpone some interviews).

Data Analysis

Cousin (2005) posits that data collection and data analysis proceed simultaneously. She goes on to state that first impressions often alert the researcher that there is something that needs to be attended to or modified. In doing so, it is imperative to organize the data accordingly. I typed all observations and field notes and transcribe all interviews and reviewed continually. From this, I discovered emergent themes through coding. Glesne (2006) notes that codes help connect stories and shape themes and patterns in the data. Codes were developed based on the three tenets of Culturally Relevant Pedagogy and the framing theories used to define the single-sex educational spaces. Additional codes were derived from the relevant literature. Following the development of emergent themes, I situate each emergence in a particular theme or framework for further analysis.

Trustworthiness

To ensure the validity of qualitative research data, the researcher must conduct research in an ethical manner (Merriam, 1998). Creswell (1998) defines a variety of features the researcher must consider to ensure that the research is trustworthy. Lincoln and Guba (1985) note that trustworthiness is necessary to assess the worth of a study. They specifically posit that the study must establish credibility, transferability, dependability, and confirmability. Lincoln and Guba (1985) posit that credibility denotes confidence in the truth of the findings, transferability demonstrates that the findings are applicable to other contexts, dependability highlights the consistency of the findings and

the ability to repeat the findings and confirmability identifies the level that maintains neutrality in that the findings are shaped by the participants and not researcher bias.

For this research, I used triangulation, peer review and debriefing, and member checking to ensure the validity and trustworthiness. I used field notes, classroom observations and interviews to triangulate the data and peer review, debriefing and member checks to ensure the reliability of the analysis. Two post doctoral students and two doctoral candidates familiar with the method of portraiture, culturally relevant pedagogical practices and qualitative research methods read drafts to provide insight and questions regarding the data presented. I shared my field notes and developing themes with the four aforementioned individuals to gather a consensus from my peers. We discussed the themes to ensure that they aligned with the research questions. Additionally, I checked with participants to ensure that interview transcripts and field notes were in agreement with our conversations and their interactions in the classroom. During the follow-up interviews, I asked a variety of questions to provide clarity to things that I saw or heard during my observations as well as information captured from the interviews.

My Role as The Researcher

I am the proud product of Cincinnati Public Schools. I was fortunate to attend an elementary school where I was exposed to culturally relevant teaching practices during my elementary school experience. I was naïve enough to think that every Black child had an elementary experience like mine. My teachers expected excellence in all that I did. I was also raised in a household where failure was unacceptable and mediocrity was

frowned upon. My teachers were connected to my parents and knew that the only thing to do when I was not focused was to threaten to call my mother. I quickly modified my behavior and regained my focus.

As I transitioned to high school and college, I was confronted with the inequalities that existed in education and felt compelled to do something about it. However, my parents expected me to maintain my career goal of becoming a doctor. I would later transition to education because I recognized that my passion was not in medicine but rather in the development of relationships with young people to help them achieve. I wanted to be like the teachers I so fondly remembered from my elementary experience. To this day, I share every accomplishment with my elementary teachers.

As a researcher, I bring my own biases to this work due to my own educational experiences as a student in public schools and as a subsequent teacher. Most importantly, I bring my identity as a Black male, which provides a particular perspective when talking about single-sex education in a predominately Black school district. Cincinnati had several single-sex schools that represented excellence in academics and sports locally and statewide. My assumptions were that the single-sex schools in this study would be alternatives to traditional coeducational environments for academically successful students. I assumed that each school would be numerous innovative opportunities and strategies to define these learning environments. I also assumed that the single-sex schools would specifically recruit and cater to African American students. While my assumptions were slightly off, I contend that I was able to observe each environment with an open mind to capture the portrait as it occurred and not as I wanted to be. I continually

think about my journey to this point in my educational career. I think about being a high school senior that had to sit in my counselor's office and listen to him tell me the only reason I would be going to college was to fill a bed and meet a diversity quota. I also think about a time I questioned why African American history was removed from the social studies program from a major university where I worked as a teacher education advisor and I remember being told students learn enough African American history in the introductory American History course. I remember how I felt compelled to speak but did not have the authority, despite being a Black man, to assert my opinions. I take these pivotal moments and so much more with me as I reflect on my role as a researcher and portraitist to capture the good in these stories while identifying challenges that will be met through discovery of new and transformative theoretical frameworks that promote methods excellence and rigor in urban school teaching and learning.

Chapter 4: Findings

Introduction

In this chapter, I present findings in three sections to capture the unique cultures that were present in each of the schools used for this study. Each section will include 1) a definition of the learning environment as it relates to the four strategies associated with single-sex education and 2) an account of the pedagogy and interactions of the teacher participants. The third section will examine general themes as they relate to the research questions. Fergus and Noguera (2010) identified two theoretical models for the design of schools for Black and Latino boys:

1. Schools need to understand and have knowledgebase of their (i.e., Black and Latino boys) social/emotional needs.
2. [They must] understand how their academic needs have surfaced and target strategies for addressing them. (p. 4)

These criteria provide great exemplars of frameworks that help assist in understanding and identifying skills necessary in developing single-sex schools for boys. Additionally, their research targeted Black and Latino Boys. Their framework provides a foundation for the analysis of strategies used by single-sex schools that differentiate them from the traditional coeducational environment. Fergus and Noguera (2010) outline four strategies and subsequent sub strategies that support each of the four strategies. They advocate: 1)

creating a positive school climate and culture, 2) instituting rigorous curriculum and instruction, 3) preparing youth for college, and 4) developing social/emotional gender and race identity.

For girls, Evans-Winters (2005) encourage teachers to utilize Critical Urban Pedagogical practices to enhance the resilience of African American girls in school. She specifically outlines five areas central to the incorporation of the pedagogical practice that include: 1) understanding the cultural context of the student, 2) developing gender specific programs, 3) self-determination, 4) self-reflexivity, and 5) cultural aesthetics.

As discussed in chapter 1, this study examines the relationship between pedagogy and identity in single-sex schools. As demonstrated in chapter 2, CRP seeks to help students understand educational concepts by using cultural practices that are familiar to students and that encourage them to challenge the status quo. The three tenets of CRP (i.e., academic success, cultural competence, and sociopolitical consciousness) were used as resources in organizing and analyzing the collected data. Fergus and Noguera (2010), Evans-Winters (2005), and Culturally Relevant Pedagogy (CRP) were used to examine the three research sites.

During my observations, I focused on the interactions between teachers and students, interactions between students, how the teachers' practices considered gender, and how learning tasks were structured to assist with student learning. Finally, the data for this chapter is reported as a series of themes relevant to each research site.

Scholar Academy for Boys

Historical Sketch

Scholar Academy for Boys is located in the well-established Reed neighborhood of Central City. Initially the neighborhood was established as an upscale community to accommodate White residents in the 1920s. However, shortly after World War II, there was a growing demand for housing in Central City area and the neighborhood began building Cape Cod style homes and stucco ranch homes. Today the population of the neighborhood is 6829 residents and the median home value is \$162,409. The current demographics of the neighborhood are 59.2% white, 35% African American, 4.2% Latino; 27.6% of the community holds a bachelors degree. The average household income is \$47,489. Much of the neighborhood has retained original charm that drew many of the residents to the area and the neighborhood high school has a rich history that has drawn luminaries and dignitaries from around the world.

The Reed neighborhood is uniquely located in Central City in that it is positioned between two very distinctive suburbs. To the west is the affluent Amberly neighborhood that is home of the city's two elite single-sex school for boys and girls, St. John's and Central Academy for Girls respectively. These two schools are highly regarded by various social circles as the epitome of excellence in education. Tuition at Central Academy for Girls is \$18,000 for sixth grade students, \$19,000 for seventh grade students and \$19,500 for eighth grade students. Tuition at St. John's is \$8390 for students whose family belong to a participating Catholic parish and \$8690 for students whose family does not belong to a participating Catholic parish. According to the 2010 census,

Amberly has 13,057 residents; of these residents, 88.1% are white, 5.9% are African American, 1.8% are Hispanic, and 1.5% are Asian. Amberly also has a significant number of Jewish residents making it one of the largest Jewish communities in this region of the state. The median property value is \$258,253.

To the east is the Butler neighborhood, which is considerably less affluent than Amberly and Central City. Since the 2000 census, Butler has experienced a significant change in its demographics. According to the 2010 census, Butler has 18,062 residents, 53% of whom are white, 29.3% African American, 9.9% Hispanic and 1.5% Asian; formerly, the population was represented as 74.4% white, 19.1% African American, 2.04% Asian, and 2.95% Hispanic. Butler was initially a farming area until the housing boom occurred in Central City after World War II. In response to the growing need for housing, Butler transitioned from a farming community to a residential community and became fully incorporated in 1947. In addition to single family style homes, a large number of apartments and townhomes were built in the area.

Each of these neighborhoods are unique in that they remained separate municipalities due to Central City's annexing and water-sewer policies, which helped Central City avoid the suburban encircling effect. . However, due to rapid growth in the city after World War II, the neighborhoods were surrounded by Central and became regarded as "inburbs," or suburbs within the city municipality.

Transition to Scholar Academy

Prior to becoming a boys' school, Scholar Academy served as the neighborhood middle school for the Reed community. The two-story brick building shows its age and

appears somewhat desolate except for the cars parked in the teacher's parking lot. Near the front door there is an expansive courtyard with a flowerbed that appears to be overgrown and not well manicured. The large steel doors are reminiscent of other school buildings in the district, neither decorative nor unique. However, once inside the building, the school is alive with activity. There are banners displaying various colleges and universities that represent the Big Ten, PAC 12, Ivy League, and Historically Black Colleges and Universities (HBCU). There is also a community board with upcoming events and special announcements. Posters display motivational words of encouragement and are positioned close to the entrance of the auditorium, which is to the immediate right of the entry doors. In this bright and clean space there is a television monitor drawing scholars' attention to a variety of announcements. Two of the most notable focal points in this area are the large display case that houses a school uniform and the school creed and a bulletin board that displays student work. In the past, the bulletin board has also displayed scholars who have achieved academic success.

In the main office there is a large portrait of the school personnel and to the right there is a portrait of the scholars that attended during the first year. To the left is a waiting area, reminiscent of a living room, with four oversized chairs and a coffee table. On the wall above these seats is a plaque with an article from Central City's primary news outlet that highlights the opening of the boys and girls schools in Central City; the tone of the article is competitive as the title includes the words "instant rivalry" in defining the two schools. The main desk is adorned with a stencil school motto and the district motto is clearly visible on the wall. The staff is very warm, friendly and welcoming.

As I walked around the school I noticed extensive displays of student work. Teachers post completed student assignments and projects on walls and identify high achieving students throughout the building. College banners of nationally recognized colleges and universities are displayed consistently throughout the building.

Mr. Henderson, the principal, is a charismatic, well-groomed, soft-spoken leader who was open to the opportunity to learn more about the school and how the school intends to academically and socially develop young men. It is apparent he is very interested in the welfare and future of the young men in this building; it is also apparent that he is highly committed to the staff and supports them continually, as evidenced by the expectations he placed on each student.

Strategies Specific to the Single-Sex Learning Environment

Strategies that Create a Positive School Environment and Culture

Community

Attendants of Scholar Academy are highly regarded and are called scholars as opposed to students to promote continual academic growth and social development. Every morning the students meet in the auditorium prior to the first class. This brief meeting provides an opportunity to disseminate any important information, announcements, and upcoming events. Scholars then report to the regularly scheduled classes for the remainder of the day. On Tuesdays and Thursdays, scholars attend an advisory session where they are given instructions on teambuilding, overall academic development, and social development skills, and also are given the opportunity to discuss

issues and problems that they are experiencing as scholars in the building. Mr. Henderson notes that:

Advisory for us is really a way to build the team, really informal in a sense where they're having an opportunity to kind of address some issues or kind of discuss some topics that they have as an interest for those advisors. And then also it builds; it's helping us to build community here because we may have some big things where all advisors are involved at the same time. (Principal Interview, March 14, 2012)

Additionally, the students are often invited to a town hall meeting where they participate in a variety of activities designed by the faculty, staff, and administration of the school. During one occasion, I observed a community engagement event in which parents also participated in a variety of events planned by the school. The students were split into four groups and rotated and participated in volleyball, four square, computer free time, and a feast prepared by the parents and teachers.

School Uniforms

The principal and teachers developed a uniform policy which is strictly enforced. The administration and faculty support the dress code, which is designed to provide scholars with a sense of community, prepare them for future corporate expectations, and to shift the focus from appearance to academics. The uniform is also a cost effective measure for parents. The school uniform consists of two categories. The first category is the mandatory uniform that consists of black slacks, white Oxford shirt, a maroon tie, a black vest with the school crest on it, a black belt and all black shoes. Students are required to wear the mandatory uniform on the first day of school and every Monday and Wednesday thereafter. Additionally, students must wear the mandatory uniform for

special programs, invited speakers, school visitations by potential students, awards and recognition ceremonies, and school pictures. The second optional uniform allows the students to wear polo shirts, black or white sneakers, or black walking shorts.

School Creed

During advisory sessions, scholars, faculty and staff are required to recite the school creed from memory. The creed is continually reinforced in the classroom as teachers use it to support their expectations of students. Additionally, the school adopted the mnemonic ARISE, which reminds the students of Accountability for their actions, Respect for themselves, their teachers, and others, Integrity in their assignments and work they present to their teachers, Service Minded creating opportunities to serve the school community and community at large, and Excellence(in all they do).

Strategies for Rigorous Curriculum and Instruction

Small Group Instruction

One of the core values of the school is smaller class sizes. During the inaugural year, class sizes averaged 15-18 students and teachers were able to assist students with individual learning needs. During the second year, some of the observed class sizes averaged 20-24 students, however the advisory sessions consists of 10-12 students.

Course offerings

Students are offered a variety of electives in addition to their core academic classes of mathematics, language arts, reading in the content area, science, and social studies. Elective courses include band, Spanish, computer technology and art. Students

select the courses that appeal to them and attend the courses during a two-quarter semester. At the end of the semester, they transition to another elective course.

Strategies focused on College Preparation

College Connections

The goal of all students who attend Scholar Academy is that they will attend 4-year college or university. To reinforce this goal, teachers display the banner of the alma mater in their classroom. The aforementioned posters and banners of colleges and universities throughout the school are constant reminders of the eventual goal. Atlanta's Morehouse College, a private male historically Black College, is of particular interest as its maroon and white school colors are similar to the maroon and black colors of Scholar Academy.

Summer Enrichment

Students are required to complete projects and readings during the summer and to present them at the beginning of each school year. For instance, in social studies, students were required to examine the branches of government and prepare a comprehensive report and develop an artistic display for each branch. Students were also required to read for language arts classes and to develop book reviews and summations of their readings.

Strategies Focused on Social/Emotional Development of Gender and Race Identity

Celebrating Parents

Two significant events occur for the students each year, Donuts with Dad and Muffins with Mom. The Donuts with Dads and Muffins with Mom programs provide an

opportunity for parents, guardians and parental figures (i.e., grandparents, aunts, uncles, Godparents, etc.) to learn more about the school, see what their child(ren) are doing in class and to connect with the principal, teachers, and support staff within the school. The programs resemble a traditional open house. However, the focus is on the school as opposed to specific academic classes.

During Donuts with Dads program, the band played two selections, students recited the school creed for their fathers, and one advisory group presented a skit. Afterwards, Mr. Henderson gave a brief overview of the school, the school expectations, and the goals adopted by the administration, teachers, and school support staff. He also informed the dads what their child(ren) were doing in the school. Afterwards, the students escorted the dads to the cafeteria where a sampling of donuts, juice, milk and coffee was available. The parents and faculty and staff of the boys' school donated the food and drinks. Once everyone received their donuts and juice, students and dads mingle with one another while the principal and the teachers became better acquainted with the dads. Another event is a mother/son dance that occurs during the spring.

Special Programs

In addition to the advisory sessions, there is a mentoring program that supports students who incur difficulty either with academics, socialization, or both. Mr. Henderson explained that:

The district provides big brothers and big sisters with information, data from attendance to disciplinary infractions and so forth and they place them on a level, red level, yellow and green. And so those students, scholars that are in the red zone, those are the ones that are targeted for mentoring through big brothers and big sisters. And so what we try to do is kind of bring, well not kind of, but we're

trying to support other scholars who have not been identified in that area in the red zone through the mentoring with the Resource Center, they come on Fridays. And we were trying to do a high school peer mentoring type piece with St. Stephens [the highly regarded private all-boys' school in Amberly] but that has not materialized as well. (Principal Interview, March 14, 2012)

Scholar Academy Instruction and Teacher Interactions

Ms. Thacker

Ms. Thacker is an African American female with twenty years of teaching experience in Central City Schools who teaches 7th grade social studies. As one of the original teachers selected for Scholar Academy, she exhibits much patience, maternal nurturing, and reproach with her students. She corrects students who are disruptive or who present behavior that is not acceptable in the learning environment. However, she is also very encouraging and provides positive reinforcement to ensure that students are successful. After giving general instructions, she often spends time working with students one on one. She seems to understand how to communicate with the boys, which may be attributed to her being a mother of three boys.

Upon entering Ms. Thacker's room, it is apparent that she is focused on the success of her students. To the immediate right is a desk with a crate filled with homework and assignments for students who may have missed class or may not have received specific handouts for work being done in class. Next to the desk was a bulletin board that displays student projects. Five computers face the back wall and above the computers is a large laminated poster listing specific actions that may warrant a merit or demerit. Beside the computers is a reading area nestled between two bookshelves; there is a rug on the floor between the shelves and pillows to provide sitting support reading

comfort. When showing a PowerPoint presentation or video, Ms. Thacker will allow the scholars to sit in this reading area to get a better view of the screen. Adjacent to the reading area is a large cabinet for storing learning materials. To the immediate right is a desk that may be occupied by a student unable to focus while were sitting at one of the tables in the center of the classroom.

There is a wall of windows opposite the classroom entrance and the electric pencil sharpener is located there. Students often congregate around the pencil sharper and are fascinated with it. Toward the front of the room there are two large storage cabinets similar to the one in the rear. Beside these cabinets is Ms. Thacker's orderly desk, stacked with a variety of papers and assignments for the students. Ms. Thacker rarely sits at it during class as she often walks around the classroom to help students remain on task and to answer scholars' questions about specific assignments.

Behind Ms. Thacker's desk is the main dry erase board where she lists the agenda for the day. Below the dry erase board are four crates provided for student notebooks. These notebooks remain in the classroom and are used for note taking and for storing homework and class work. There are two additional storage cabinets and a sink near the front of the room. Students use the sink area to wash their hands, get a drink, or to get tissue to blow their nose.

The room is very large relative to other teacher classrooms. It is the same size as the neighboring art class and allows Ms. Thacker to move freely among the students and assist them with their work. The tables are arranged strategically in pairs to create student work groups and can accommodate four students. As previously noted, Ms. Thacker is

referred to as 'Big Mama' by family and friends, which could explain why her room helps students feel comfortable. It's as if her room is an extension of her persona.

A large plaque is visibly displayed and notes that, "Children are a gift from God." Her bulletin board is full of student work and projects. Throughout the student-centered room are large posters that display expectations and consequences for not meeting those expectations. Ms. Thacker's commitment to her students is evident in her actions. On the day of our first scheduled interview, Ms. Thacker was upset and frustrated by a situation in which a student had been removed from the school, despite her attempts at intervention. When I asked if she wanted to reschedule our interview, she said no; she expressed that she felt she had done everything she could to prevent the student from being removed from the school.

Another example of Ms. Thacker's commitment to her students is her upholding the parents' expectations of their students. On one particular day, two students were goofing around with one of the student's glasses. Upon noting the behavior, Ms. Thacker asked, "Do I need to talk to your mom about how your glasses cannot stay on your face?"; the student promptly responded, "No." and placed the glasses back on his face. While Ms. Thacker often calls out students on their disruptive behavior, she typically followed up with a one on one session to restate her expectations of the scholar and what she believes he needed to be doing with his time. She often asks if the student needed additional help or support. Students may not have liked being called on their behavior but they did not show disrespect to Ms. Thacker.

Ms. Thacker's Pedagogical Approach

Ms. Thacker works continually to develop social studies lessons that challenge her students' imagination and academic abilities. Her use of creative assignments allows her students to use their imaginations as well as incorporate other critical skills necessary to complete the task. While providing an environment where students can grow and learn, she did differentiate her teaching strategies in the single sex environment from her strategies in a coed environment. She noted that:

We usually do like at certain areas in the room where they work in cooperative groups and they move around. They can work together more often and talk. I know most co-eds they don't want a lot of talking, not a lot of shared thinking and learning. I do incorporate a lot hands-on...
(Teacher Interview, February 22, 2012)

During one observation, students moved around the room to look at posters displaying various aspects of the Roman Empire to gather information for the in-class assignment. She also developed creative assignments in which students used information relevant to their understanding of political structures and how countries are governed and organized, to create their own country.

In addition to developing a variety of lesson plans that looked at alternative means for students to learn, Ms. Thacker seeks to provide an environment where students can contribute to the classroom and the community at large. When asked specifically to define a culturally relevant teacher in an all boys' environment, she noted that:

They [the teacher] know what issues young boys are going through in this day in society, what's going on, getting to know them instead of just a student, [as if they are just] a number, [or that I] need to make sure you get the proficient amount of numbers to pass the state assessment, I am

looking at them as individual, relationship is very important. (Teacher Interview, March 14, 2012)

She often uses information about the student's personal likes and dislikes to encourage them to actively participate in class and to develop relationships with her students.

Academic Success

Ms. Thacker's goal for her students is that they, "Put their education first" as well as realize that, "It's okay to be smart." Ms. Thacker is very supportive of success and specifically notes that she has noticed that some students are reluctant to share their achievements because some students are not encouraged by their peers to succeed. Ms. Thacker wants the high achieving students to "encourage their friends so it [becomes] a friendly competition." When one student did not see his work displayed on a bulletin board and showed some obvious disappointment on his face Ms. Thacker reassured him that that his work was excellent and that that she would eventually put his work up for everyone to see. She told to him that it was obvious that he spent a great deal of time on the assignment and that she was very please with the work he did. The student instantly smiled and quietly thanked her. Her acknowledgement of his disappointment without is an indicator of Ms. Thacker's connection to her students.

Cultural Competence

Ms. Thacker believes that it is imperative to know her students and to develop a relationship with them. She often spends much time learning about their goals, desires, dreams, and familial life. She uses this information to create assignments that align with

specific interests of the students such as using Facebook to design pages for historical figures.

Sociopolitical Consciousness

Ms. Thacker is interested in helping students invest in broader themes associated with social studies. She promotes advocacy and community involvement, however she does regularly use of this technique.

Ms. Hardy

Ms. Hardy's style of teaching was different than that of many of her colleagues. She has an outgoing personality and connects easily with. When Mr. Henderson invited me to a staff meeting to talk about my study and recruit participants, Ms. Hardy was very focused on what I had to say and asked insightful questions during my presentation. She also offered very encouraging words about the potential of this type of research and the impact that it could have on future implementation of single-sex schools. Her professional, education and life experiences seem to have provided her with insight into many of the challenges that students encounter. Her 30+ years of teaching at national and international levels give her a very distinct perspective of the lives of her students. She often incorporates alternative methods of assessment to determine how well students understand the course material. During one observation, she engaged her students in a song to help them identify specific body parts about which they were learning in Spanish; during another observation, she gave the students the option of jumping rope to help them count to 15 in Spanish.

In addition to teaching Spanish, she directs the in-school disciplinary program that helps keep students in the building who would have otherwise been suspended, so that they can remain on track with their work and on schedule with their classmates. She uses the time to not only provide individual attention for the scholars she is assigned, but to talk to them about their decisions and to discuss methods to help them avoid being placed in her care in the future. She notes-

This is for the scholar who is struggling academically or behaviorally and this is the place where they come to write goals, make behavior plans and that sort of thing. In the middle schools and talking with my fellow star teachers it is that it does look a lot like the old in-school suspension because administrators are choosing to use it that way. Here at Scholar Academy, it's both. If Mr. Henderson needs a place to put scholars who he does not want to suspend out, he wants them to stay in school. He wants them to hear positive things. So, he does that. We also allow teachers to put scholars in Star if they are just so far behind. They'll come here to make up work for a day for example. So, it's a little bit of in-school suspension in a whole lot of a place to come when things aren't working for you. (Teacher Interview, January 15, 2012)

Her classroom is adorned with many artifacts from her travels and experiences in Spanish speaking countries. Decorative posters and shelves covered with material vibrant in color are reminiscent of the sights seen in countries such as Mexico, Venezuela, and Spain. Students are exposed to a variety of teaching tools that enhance their understanding of the language and focus on not just verbal mastery but application and usage as related to every day life amongst Spanish speaking people. The tables in her class are in a U-shape so that students can draw their attention to the front of the classroom; inside the U-shape is a series of forward facing tables and chairs. Ms. Hardy notes that:

I couldn't get through those rows and they weren't looking at each other, they were looking at the backs of each others head. And one of the things that boys have a problem doing is looking people in the face. I accepted that they don't but my thinking is let's try it, so now as you can see we can all see each other in this square, this semi-circle and it's worked wonderfully. (Teacher Interview, January 15, 2012)

Each table has the Spanish textbook, a utensil box with variety of supplemental supplies such as color pencils and markers, and all relevant materials that will accompany the lesson on that particular day.

Ms. Hardy's organized, clutter-free desk is located in the rear of the classroom. A basket with a variety of glasses is on the corner of the desk; she sometimes asks students to bring her a specific pair from the basket during lessons. During instruction, Ms. Hardy always stands towards the front of the class; she never is at her desk, even when students are taking tests or working independently on an assigned task.

Beside the desk is a large bulletin board that Ms. Hardy uses to display student work. The four computer terminals on the other side of her desk are situated so that Ms. Hardy can see what is on the monitors from most angles in the classroom.

Ms. Hardy's Pedagogical Approach

During my first visit to Ms. Hardy's class, I noticed how attentive and responsive her students were when she asked questions. She said that she doesn't have to worry about behavioral issues too much because students spend great deal of time listening so that they can give the appropriate responses in Spanish. Ms. Hardy also continually provides positive feedback to students, often telling them their understanding of and speaking Spanish is better than many high school students and that she is excited about

how much and how fast they are learning. When asked how she modified her lessons and pedagogical approaches to teaching boys as compared to her experience with teaching in traditional coeducational environments, she stated she gives them more freedom to move around. Ms. Hardy also noted that she willingly tries new approaches to learning based on her readings about how boys learn and things that they like to do while learning. This was very evident during some of the observations when Ms. Hardy assigned activities for the boys to do to accompany their learning tasks such as singing and creating memorable mnemonic to help her students retain information.

Like Ms. Thacker, Ms. Hardy strives to create an environment where the students learn together. She notes that:

A culturally relevant teacher needs to be truly, not just verbiage colorblind because I... you'll see that we typically, we are in a city school and we have a predominantly African-American culture, so that can be an issue. Cultural also as far as money we have the haves and the have-nots, so that has to be that cultural piece also. Culturally relevant in knowing the boy culture, I think the boy culture is a huge issue. So, not only color wise, not only money wise but also boy wise. Those should be my three definitions I think of culture. (Teacher Interview, March 14, 2012)

Ms. Hardy focuses on how boys learn and is very linked to what the literature says regarding brain-science. However, while she exhibits knowledge of this particular style of learning, she does exhibit culturally relevant practices in her teaching.

Academic Success

Ms. Hardy tells her students that they are doing better than the kids she taught in high school. She holds high expectations of all of her students but provides constant reinforcement to let them know that she is proud of their continued success. She pushes

her students to be critical thinkers encourages discussion to help students understand concepts related to the subject as well as concepts regarding students' overall academic success. When students come to her for being disruptive in other classes or as a preventative measure to avoid suspension, she spends the time helping the student connect to being a successful student and encourages them to work towards their educational goals.

Cultural Competence

Ms. Hardy spends a great deal of time teaching about Spanish culture to help students develop an accurate portrait of Spanish speaking countries and to dispel some stereotypical images of native Spanish speaking countries. Ms. Hardy notes that the students are “shocked” when they see that “Spanish speaking people come in all color hues and [varying] financial [status]”(Teacher Interview, March 14, 2012). Her students experience videos, festivals, and food that are synonymous with Spanish speaking countries and she accompanies these festivities with a lecture that describes the event and discusses what they do during the festivities. During one observation, Ms. Hardy discussed the Day of the Dead ceremony to help students understand its significance in Mexican culture. She then connected the similarities of this celebration to celebrations that students participated in with their families.

Sociopolitical Consciousness

Ms. Hardy is invested in developing broader themes and helping her students understand that Spanish is a tool to help present “more global thinking about what

education is.” She actively engages students in discussions of controversial topics such as bull fighting and utilizes her experience living in Spain to transform their perception of the sport and to help them understand the different views of the sport, such as the savage imagery versus the art of the sport.

Mr. Draper

My first impression of Mr. Draper’s technology classroom was that it was not as decorative as the other classrooms. The primary mode of instruction was the computers along three of the four walls, which created a u-shape. Students work with their backs to Mr. Draper, allowing him the opportunity to see what they were doing at all times. Mr. Draper has a set of four tables in the center of the room, used as a learning station, which doubles as a station for class materials for specific assignments and a display area for student projects. These tables are also used to assist with students who experience difficulty staying on task. If a student is not following directions or is being disruptive to peers, he is asked to sit at the table so that he can refocus his attention. This may not seem to be a very harsh punishment, however, generally students do not like to be deprived of time on the computer, and often change their behavior quickly to convince Mr. Draper that they are able to follow instructions and work on the computer.

Mr. Draper has 6 years of teaching experience. He has a calm demeanor while interacting with his students. His students are engaged with a variety of interdisciplinary assignments that range from designing a cell phone to performing a virtual knee replacement surgery. He readily includes examples from physics and mathematics to help students understand the connections between technology and the core subjects of

mathematics and science. An interesting observation of this class is that although some of the students are quite disruptive when observed in other classes, they are essentially on task and focused on the work that they must complete in this class, due in part to the engaging assignments.

Mr. Draper does not have what would be considered a traditional teacher desk. He has a table that is neatly organized and provides a place for his laptop computer to rest. His work area is situated so that he can see every student and every computer in the U-shaped room. There are large gray file cabinets to the right of his desk. The main entrance to the classroom is just past the file cabinets. Positioned slightly off-centered from the middle of the room is a portable cart with an overhead projector that Mr. Draper uses when providing demonstrations of upcoming tasks or lecture notes for a new lesson or unit plan.

Mr. Draper's Pedagogical Approach

One noticeable trend in Mr. Draper's class was that some of the students who were disengaged in other classes behaved differently in his classroom. A few students, who were somewhat of a challenge in other classes, excelled in Mr. Draper's class. One student, Jai, was so focused on his work in this class that he was often called upon to assist other students who were not as far ahead as he was. However, in Ms. Thacker's class the previous period, Jai had been so disruptive that Ms. Thacker had to sit with him while he did his class work.

Initially, I thought the contrast was because the students were working on the computer, however, I learned that Mr. Draper developed lessons that appealed to a broad

range of interest. When asked what the biggest difference was between his previous job at a coed school and this all male school, Mr. Draper stated that, “[at my previous school] I would design lesson plans to control behavior [as opposed to here] where I think about how I can academically challenge [the students].” (Teacher Interview, November 11, 2011) When asked how he defined a culturally relevant teacher, he immediately pointed out that it “is a lot easier being male...you kind of understand how they tick.” (Teacher Interview, March 14, 2012) However, Mr. Draper’s definition did not target any pedagogical practices that supported how his views matched his teaching.

Academic Achievement

Mr. Draper creates an environment specifically designed for student growth and development. He holds high expectations for his students and tries to foster an environment that allows students to explore and develop.

Cultural Competence

Mr. Draper noted that he wished he knew more about their [the students’] lives. For those students about whom he did have knowledge, he engaged them with activities that aligned with their interest and future goals. He also incorporated general information into lesson plans about professions in which his students indicated interests. Mr. Draper created projects that provided examples of physics in relation to everyday functions and had students build specific apparatuses to show their understanding of the concepts. The students seemed to enjoy the activity and competed to see whose apparatus would function the best they also demonstrated their knowledge of physics principles without

actually participating in a physics lecture. They began to understand the general principles based on the demonstration and Mr. Draper then discussed real world applications and problems; his students were to take what they were doing for “fun” and apply it to their world.

Sociopolitical Consciousness

Mr. Draper often talked to his students about their actions and how those actions might affect their future, however, this particular tenet of CRP was not observed.

Excelsior Preparatory for Girls

Historical Sketch

Hayes Township is regarded as one of the first suburbs of Central City and sits just east of the downtown area. Its history dates back to 1870 and boasts an historical address book for many of the most illustrious figures in Central City history. The homes are expansive and range in style from Victorian and Gothic revival to Tudor and American Craftsman. With the development of the highway system, Hayes Township began to experience “white flight.” Subsequently, by the 1970’s, the areas population of mostly affluent white families began to shift to primarily African American families.

Today, the area is experiencing what some refer to as revitalization while others regard it as gentrification. Many African American residents complain that they feel as though they are being forced out of the neighborhood by new developers, many of whom are gay. The current demographic data of Hayes Township is 81.6% African American, 14.2% White, and 1.5% Hispanic. The median income is \$32,986.

The Excelsior Preparatory School for Girls is a part of this historic and changing neighborhood; in fact, the school is located west of the affluent Amberly neighborhood. The school is situated amongst the historic homes but its original design was futuristic. Much like the Scholar Academy, Excelsior is housed in a building of a former middle school that was closed due to changes in the district; directly behind the school is an old elementary building that is no longer in use. Once modern and new, Excelsior's appearance today makes it look somewhat worn and out of date. One interesting geographic feature is a large grass hill that surrounds the school and virtually hides the small, inconspicuous first floor windows. At first glance the second floor oblong, tinted external windows appear to be on the first floor.

Much like Scholars' Academy, the inside is drastically different and vibrant with colors. The walls are accented with pink and the display cabinet by the main entrance is filled with student work and artistic expressions as well as the school creed. Initially when I met the building principal, Ms. Norris, she was not interested in my participating in the study.

We met again on a warm fall day and it was then that I understood that her hesitation was not resistance to my study; rather, her hesitation was due to her protective nature and concern for how the girls would respond to 1) an observer and 2) an outside observer who happened to be male. Her concern also stemmed from the belief that she might have to monitor the interviews with the students. Once she clarified her expectations, she invited me to conduct my research in the school with some restrictions: 1) I was not permitted to observe the advisory session due to confidentiality

purposes, 2) I was not permitted to observe special programs, presentations and speakers, and 3) I was only permitted to visit classrooms for which I had permission from teachers to observe.

While it seemed that school fostered a great sense of community through a variety of activities and special speakers, I was only able to discern that from the classroom instruction and based on what I was told by the principal, teachers, and the student participants.

Cultural Context of the Student

The teachers that I observed utilized culture differently. Ms. Carlson incorporated the lives of her students on a daily basis through a variety of lesson activities designed to enhance the learning of her students while Mr. Mangrum focused more on the development of lessons that transformed their thinking on broader and culturally rich examples. Mr. Mangrum did not specifically use the individual culture of the students, but rather the general culture of the girls. His pedagogical approach in mathematics did not specifically seek to engage the individuality of the students. However, during his advisory sessions, he developed activities that helped students understand and connect to issues that effect them as urban students such as the Trayvon Martin murder case and the notion that assessment tests suggest that Black students are academically inferior to their White counterparts. Mr. Mangrum helps students confront negative stereotypes.

I did not observe either teacher develop lessons that confronted gendered ideas or patriarchal roots to the development of what it means to be an urban female in the United States (US). However, Ms. Carlson connected with her students personally and often held

open sessions with her homeroom class to discuss issues that bothered the students individually. During one session, students discussed the difficulty of growing up poor and not being able to afford things that they wanted as well as how being poor effected their family. At the conclusion of the discussion, Ms. Carlson noted that the students shared stories about their home life and many students were able to connect and bond over their similar backgrounds.

Developing Gender Specific Programs

Every morning the students met in the auditorium prior to the first class. This brief meeting provided an opportunity to disseminate any important information, announcements, and upcoming events. Scholars then reported to the regularly scheduled classes for the remainder of the day. On Tuesdays and Thursdays, students were placed in an advisory session where they are given instructions on teambuilding, overall academic development, social development skills, as well as the opportunity to discuss issues and problems that they are experiencing as students in the building. Ms. Norris notes that advisory program has helped decrease tensions between the girls and has given students the opportunity to connect with one another and the staff. Additionally, the students were often invited to a town hall meeting where they participated in a variety activities designed by the faculty, staff, and administration of the school. I was not able to observe any special presentations or advisory sessions due to confidentiality concerns as expressed by the principal.

Self-Determination

Each of the teachers I observed developed methods to specifically involve students in the educational process. During one observation, Mr. Mangrum opened by asking students what they felt he needed to do to help them understand the course material. Students then engage in a lively dialogue with Mr. Mangrum asking him to do specific things to help them understand the subject. He then modified his teaching techniques and students became more engaged in the learning process. Ms. Carlson also considered the opinions of her students and helped them develop arguments regarding their specific learning outcomes. Overall, the teachers sought to engage the students in the course development process. They modified their instruction based on the expressed needs of their students.

Self-Reflexivity

Each of the teachers observed held high regard and maintained high expectations for every student in class. It was evident that each teacher had confronted notions of student learning and abilities through their lessons and teaching methods. Ms. Carlson specifically designed her class to help students achieve even though they were not as proficient in math as others in the building. However, it was not clear if teachers confronted their own notions of racism through my observations and subsequent interviews. The teachers did relate to me that the school was actively engaged in the development of programs to help students dispel assumptions that continue to reinforce sexist beliefs. They accomplish this by inviting a variety of speakers from a variety of fields to discuss career options and overcoming obstacles. Students are exposed to female

scientists and engineers as well as doctors, lawyers, and professionals in multiple career fields. Some students are paired with mentors that provide additional support and assistance to supplement what they are learning in class. As previously mentioned, Mr. Mangrum did lead discussions about race during his advisory sessions. However, they were not continual and did not fully engage the students to consider what it meant to be a girl attending an urban school.

Cultural Aesthetics

While the teachers developed lessons that allowed students the ability to express themselves, the school focused on the development of ladies. The school creed specifically noted that the students are, “Well Read, Well Spoken, Poised.” Students are not given the opportunity to express their individuality through their clothes. The principal and staff developed the uniform policy and it is strictly enforced. The official school uniform is a pink Oxford blouse with the school creed on it, a black sweater vest with the school creed, a black and white checkered cross tie, a black and white checkered skirt, black or white solid tights or knee socks, and black or brown shoes. The casual uniform consists of a pink polo shirt with school logo, black slacks, black Bermuda shorts, or a black skirt, and a solid black belt with a plain buckle. Students wear the official uniform on Mondays and Wednesdays and for special programs, guest speakers, school pictures, and awards ceremonies. Students wear the casual uniform on Tuesday, Thursday, and Friday, unless there is a special program.

The school colors were specifically selected for what they represent as outlined by the principal. Black represents class and sophistication while pink represents intuition and insightfulness, as well as hope, femininity and strength.

Excelsior Preparatory Instruction and Teacher Interaction

Ms. Carlson

Vibrant and bright are words that come to mind when entering Ms. Carlson's classroom. She meticulously decorated each wall with positive reinforcement materials that encouraged her students for the present and the future. Students can see examples of mathematical concepts Ms. Carlson does not look much older than the students she is teaching, much less old enough to have taught for 6 years. She is firm in her delivery and shows care in her tone. During my first visit as she encouraged students to answer questions based on the day's math lesson, one student began talking out of turn and expressed enthusiasm to answer the question. Ms. Carlson said, "I want her [the student that was called upon] to guess but I love the way you want to help her." Further, when the student went on to answer the question and did not get the answer correct, Ms. Carlson said encouragingly, "This is not complete but I love the way it is looking," thus encouraging the student to keep trying.

The students in the class were eager to participate even if their answer was wrong. Ms. Carlson let the students know that she liked how they tried and helped them solve the issue with the problem to see where they missed a step and/or did not understand the concept of the problem. She also encouraged the students to debate with one another

regarding the problems she was reviewing with the class; she allowed the students to rationalize their position for the answer they came to and let the class discuss the two sides before showing the students how the problem comes together. Ms. Carlson readily challenges students to think outside of the problem and relate the findings to something that is more personal to them. After this initial observation, Ms. Carlson made me aware that this class was comprised of students who did not test as high as their counterparts, thereby making the class more like a remedial course for the students.

Ms. Carlson's Pedagogical Style

Ms. Carlson spends a great deal of time helping students develop answers to problem she presented in class. She noted

They know, I don't care about the answer, and they will tell you that. It's about your thinking and are you on the right track does your answer make sense. It's about your thinking and are you on the right track and does your answer make sense... Students know I am going to ask where they got the answer from and do they make sense. (Teacher Interview, January 24, 2012)

Her lesson plans focused on developing student interest in the subject. Ms. Carlson noted that she was not good at math when she was in middle school and it was not until she moved to high school that things began to make mathematical sense to her. That drives her lesson development because she continually reflects on her experience in middle school and thinks about how her teachers presented information to her. She believes that had her teachers prompted her as opposed to saying "The answer is..." and then moving on, she may have been able to perform better in math as a middle school student.

During one observation, she gave students a set of problems and they were instructed to go to various areas of the classroom to solve the problem. The students worked in teams and collaborated on the answers to the problem. During the course of the assignments, students asked questions of one another to ensure that they came to the correct response to the question.

When asked what is a culturally relevant teacher Ms. Carlson said it is one who:

Understands. I listen to everyone and learn from everybody. I try to understand their way of thinking their way of acting, what they like... I don't think you have to be from the same place or have the same background. I think it's about acceptance... They enjoy the silly little things when I talk about what they like or their family and I just happen to be talking about a problem. (Teacher Interview, March 15, 2012)

She also listens to her students to learn more about them and subsequently uses this information to inform and craft her teaching.

Academic Achievement

Ms. Carlson appeared to be truly invested in the academic outcomes of her students. She encouraged participation and gave the students great feedback that fostered a sense of genuine concern for their academic abilities. After my first observation, Ms. Carlson explained that her classes were for students whose skills were not at grade level expectations. The performance of her students would not have supported their academic records. Ms. Carlson developed lessons that supported high expectation levels and her students rose to those expectations.

Cultural Competence

Ms. Carlson noted that she always listens to her students. She listens to what interests them and listens to what is going on in their lives. Ms. Carlson noted that this enables her to, “know them [the students] and just hear what they say and then use it academically as opposed to socially like they [the students] would.” Cite During one lesson, Ms. Carlson transformed a math problem to include a Justin Bieber reference and that made the students shift their focus from schoolwork to application. Ms. Carlson also was able to shift the focus to real life application when she taught math concepts by asking her students to give her a real life application of the problem or concept.

Sociopolitical Consciousness

Although Ms. Carlson maintained high expectations for her students with hopes that they would use the information to change the world around them, this particular tenet of CRP was not observed.

Mr. Mangrum

Mr. Mangrum, an eighteen-year teaching veteran, is down the hall from Ms. Carlson’s classroom. He noted that the first six years of his career where spent in the Central City Diocese and the remainder has been in Central City Schools as a high school teacher. This school year marked his return to being a classroom teacher as well as his first time working in a single-sex environment. He previously had spent three years working in the gifted and talented office.

Mr. Mangrum's classroom is less decorative than Ms. Carlson's and his tables are arranged in traditional lecture style seating, facing the front of the room. He teaches advanced math classes and has high expectations for his students. Even with his high expectations, his persona is more laidback than the other teachers in this study. He typically provides handouts to accompany his lectures so that the students can take notes, work on example problems, and ask questions about other problems in the packet.

Mr. Mangrum's Pedagogical Approach

During one visit, Mr. Mangrum expressed his disappointment in the grades the students received on a recent test that he had given the class. As he discussed the test outcome, he expressed that maybe he was not clear on how he explained the concept. After talking to the students about the test, he distributed a class assignment for them to complete and called each student up to his desk to review their test individually. He then spent time reviewing the mistakes the student made and worked with each one to help resolve mistakes with the problem. He then returned the test and asked the student to make the correct changes and return it for additional points.

Mr. Mangrum specifically looks for ways to make mathematics more about the process as opposed to the method. He noted

I teach skills through math and they can apply that to anything in their life. I look at as here is a problem, how are we going to solve it...I wouldn't call myself a math teacher. I teach them how to do things using math.
(Teacher Interview, March 15, 2012)

He specifically believes that a CRP teacher is one who

Makes it interesting for the kids. I sometimes act a goofball to keep them

interested in what were doing... You have to be human. (Teacher Interview, March 15, 2012)

Academic Achievement

Mr. Mangrum maintained high expectations for his students and often worked with students one on one when they did not perform well on an assessment or homework assignment.

Cultural Competence

Mr. Mangrum thought that it was imperative to help students transform the problem solving techniques in math to real world situations. He often developed homework assignments and class work that required students to transfer a mathematical application to a relevant problem designed to expand the knowledge from a mathematical computation to a life application.

Sociopolitical Consciousness

Mr. Mangrum used his advisory period to really discuss personal situations affecting the girls as well as global issues. His most intriguing discussion involved the Trayvon Martin case and the treatment of Blacks in the media in general.

Pride Alternative Middle School

Historical Sketch

Pride Alternative Middle School is located in the historic Auburn area of Central City. Auburn's historical significance is rich and diverse. The predominately African American community was once the most established area of African-American life in Central City. It is located near east of downtown and houses a nearly century old building

that once served as the only venue for African-American entertainers to use in the Central City area while the community has experienced difficulties and increased levels of crime, there is a great sense of pride in what the community means to the residents. One of the greatest sources of pride for the community is knowing that one of the best middle schools in the district was located in the Auburn area.

Pride Alternative has long been reputed as one of the best schools in the Central City area. However, recently it has encountered some difficulty maintaining that status due to a change in the student population. The principal has worked diligently to bring Pride back to its aforementioned status. The beige building has a large blue sign in front identifying it as Pride Alternative Middle School. The flowerbed in front of the school is filled with clay flowers designed by the students of the school. The building appears worn but is well manicured and clean. Across from the main office is a mural of tiles of made by students from each grade level Mr. Ferguson, the principal identified teachers for my study and escorted me to meet the teachers. As mentioned in Chapter 3, this is the only building in which teachers were hand selected by the principal because of their familiarity were familiar with Culturally Relevant Pedagogical practices.

Ms. Bennett

Ms. Bennett's class was organized and very informative. As a math teacher, she incorporated ways for the students to understand the concepts and apply them to personal situations. Her room was filled with a variety of supplemental books with the word math in the title and in the context of the story. Pictures of students on the back wall showed them engaged in a variety of different projects. Her bulletin board was covered with a

student-based project titled, such as a day in the life, which required students to develop a pie chart to outline how they spent their day and what they did. A variety of colorful mathematical posters displayed concepts and definitions for her students to use as a reference. Ms. Bennett also was dressed in an outfit similar to that required of the students.

Ms. Bennett encouraged students to think through the problems. She also expected students to participate. When disruptions arose she handled them swiftly. On one particular visit a young man was not paying attention in class and she specifically called the young man's name to answer a question. He was unaware of what was going on and Ms. Bennett responded saying, "It's about time I talk to your father again." The student immediately sat up and began giving his undivided attention. On another occasion a young lady was disruptive in class and Ms. Bennett, said "I guess you want to sit with me in church on Sunday." The student also modified her behavior and became focused on what was going on in the classroom.

Ms. Bennett did not dwell on disruptions; her students knew her expectations and knew that when they walked into her classroom the focus was on the lesson. While Ms. Bennett worked to manage behavior in the classroom, she also supported student success. She even gave students her cell number so that they could call her should they need help with homework or should they find themselves in a bad situation. When asked if the students actually use her cell phone number to call and to ask about problems, she replied that they do.

Ms. Bennett's Pedagogical Approach

Ms. Bennett also used a variety of methods to help students understand and make connections between mathematical concepts and real-world application. She spent much time assessing her own teaching and modifying lessons if students did not understand a concept or she was not clear in her expectations. During a lesson designed to help students understand fractions and how they are applicable to everyday life, she used the metaphor of shopping with her mother and finding sales on reduced merchandise at the store. The students were then required to determine the final price of the discounted item using fractions. They then had to describe how they came to that answer using the method she had previously taught regarding fractions.

Ms. Bennett defines a culturally relevant teacher as one who:

Takes the subject and relates it to something in that students' life that is relevant so for example if I am teaching about let's see if I was teaching about I am trying to think what would be, I mean even whether it's music, whether it's faith or belief or religion, whether it's what my family eat you know as far as the food, the African American eats because I teach mostly African American children. If I can bring any part of their culture into the lesson I haven't gone to the point where I feel like I can do that enough.
(Teacher Interview, March 9, 2012)

Academic Achievement

Ms. Bennett not only maintains high expectations of her students, but she also expects a great deal from herself in the delivery of their instruction. During one observation, she discussed a previous quiz and told the students that they did not do as well as she had anticipated, and that she needed to look at how she taught the information to determine if there was a better or different approach she could have taken. She then let the students know that they would revisit the material and that she would work to develop

alternative methods of instruction to help the students understand the general concepts. During other observations, Ms. Bennett slowed down and changed her pedagogical approach if she noticed that students were unable to understand what she was teaching.

Cultural Competence

Ms. Bennett often presented problems to students that were based on things that they might encounter in their lives as opposed strictly using problems from the textbook. One activity that Ms. Bennett developed was working with maps and having the students design a map of their neighborhood and talk about their specific neighborhoods and how parallel and perpendicular lines were represented in their maps. This approach helped students see the connection between mathematical concepts and the relationship they have with the world around them.

Sociopolitical Consciousness

Ms. Bennett worked to transform what students learn and to make it more applicable to the global society. Though she expressed that she struggles to do this in her teaching, she regularly broadens the scope of her teaching to help transition knowledge from something students are *required* to know to something that students *can use* to transform their lives and the lives of those around them.

Ms. Munson

The first thing I noticed upon meeting Ms. Munson was her very stoic face. I learned that she used this particular face to maintain order in her classroom; she was stern and did not allow students to disrupt the class. However when I sat one-on-one to talk to

her, she smiled and explained some of the things and ideas that she was doing in an effort to help students succeed such as scaffolding assessments based on the students needs and what they have learned and then using a variety of texts and stories that students could find more relatable in her attempt to teach them the primary curriculum as established by the school district.

Her room was filled with a variety of elements supportive of a teacher of Engl. There were a variety of books and supplemental materials to help her deliver her instruction. The room is situated so that students could see one another from every angle. Ms. Munson was organized and usually had books and papers placed on student workstations prior to them coming into the classroom; as soon as they stepped into the classroom and took their seats, their work was directly in front of them and they knew what they would be doing for that day.

Ms. Munson's class was larger than that of Ms. Bennett's because Ms. Bennett was a Title I teacher, which allowed her to teach only half the students of a mainstream teacher. Not sure what this has to do with class size.

Ms. Munson expressed some concern because the school had experienced a brief transition due to some changes in the school district; whereas the school previously had a reputation for being amongst the best in the district and required selection via lottery for admission, it had become a school that had to take additional students from schools that were closed, thereby shifting the population of the school and providing some difficulties in terms of behavioral issues. Her concern provided insight into how she governed her

class because she was facing new issues that she had previously not experienced prior to the population shift.

Ms. Munson's Pedagogical Approach

Ms. Munson's class is very structured and she is very direct. She spends much of her instructional time modifying behavior as opposed to actually instructing. During instruction, she tried to engage students by asking questions relevant to their experience. During one observation, Ms. Munson had students complete a cause and effect inventory that outlined specific causes associated with their lives and related to a text the students were reading in class. Students had the opportunity to understand how actions can lead to a variety of outcomes.

Ms. Munson defined a culturally relevant teacher as one who, "understand where students are coming from" and "making [the lesson] relevant to them to help pull them [the students] in to what they are learning." (Teacher Interview, March 13, 2012)

Academic Achievement

Ms. Munson maintained high expectations for her students and reinforced expected behavior with encouraging words when students were actively engaged or when they voluntarily participated in the lesson. She provided clear directions and helped students stay focused on specific tasks. She encouraged full participation during lectures and allowed students to actively engage in the dissemination of information relevant to the subject.

Cultural Competence

Ms. Munson has worked to understand the specific learning needs of her students and has developed a variety of methods of instruction and assessment to ensure that she is capturing the best possible image of the student. For instance, Ms. Munson worked closely with the science teacher to create a student science report for their portfolio for students who were having difficulty with reading projects. Additionally, Ms. Munson spent time in her lectures helping students transform the information that she presented into a format more closely associated with their life and experience.

Sociopolitical Consciousness

Ms. Munson is invested in the academic needs of her students. However, this particular tenet of CRP was not observed during my observations.

Determining Relevant Themes

This study was guided by two overarching questions that examine the pedagogical practices of teachers in a single-sex classroom environment compared to their coeducational counterparts, and how the single-sex environment shapes the identity of the students who attended the school. There are four significant themes that became apparent through the analysis of observation and interview data. The first theme is supported by the data presented earlier in this chapter as well as supplemental data accompanying the theme. The second, third, and fourth themes are supported with data that is presented in conjunction with the reporting of the theme. The themes are: 1) The pedagogical practices of single-sex and coeducational teachers are more similar than dissimilar, 2)

Girls develop a stronger academic and social identity than the boys in the single-sex schools, 3) Girls in the single-sex school developed the strongest identity of the three schools, and 4) When teachers use culturally relevant teaching practices, they provide greater opportunities for student success and transformation.

Pedagogical Practices

The pedagogical practices of single-sex and coeducational teachers are more similar than dissimilar. Hubbard and Datnow (2005) note that a significant portion of what is known about single-sex schools comes from quantifiable measures, which does not give adequate attention to teacher-student interaction, school context, or circumstances of student lives. Bracey (2007) further contends that single-sex schools have adopted the scholarship of Sax (2005), who argued that differences in brain development support the need for separate learning spaces for boys and girls.

Both of the single-sex schools used for this study use brain development theoretical principles as a major rationale for educating boys and girls separately. Specifically, the boys' school supports the scholarship of Gurian, Stevens, and Daniels (2009), which used gender-based brain science as the tool to create learning opportunities for students based on gender while the girls' school supports the scholarship of Moir and Jessel (1989) and Rich (2000), which focused on neuroscience as the primary basis the education of girls in separate educational spaces. Neurological differences are not a matter of contention, but rather the manner in which these researchers explore their findings to support the development of educational curriculums designed that are gender specific is a cause for debate amongst scholars.

Noguera (2012) noted that neuroscientists, who actually study the brain, have made no claims regarding the innate learning differences between boys and girls. Similarly, Ellis (2009) noted that there are no scientific differences regarding the development of the male and female brain. Tyre (2008) further contended that the teaching strategies that have been developed by brain science single-sex researchers are not supported by scientific evidence.

In this study, I found that pedagogical practices were not drastically different between the single-sex and coeducational environment. What was different was how the schools worked to meet the needs of students by the developing a learning community that supported many of the strategies that Fergus and Noguera (2010) outlined as well as the developing gender-specific programs that Evans-Winters (2005) suggests. This in turn shifted the focus from brain-science education to student-centered education that focused on the social and emotional needs of boys and girls, as well as addressing their specific academic needs. As outlined earlier in this chapter, the single-sex schools sought to establish themselves through the development of strategies that encouraged excellence and supported high learning expectations of the students.

Community as a Pedagogical Tool

All middle schools in the Central City school district are required to include a reading in the content areas (RICA) course. Based on my experience as a field supervisor for pre-service teachers, this course was typically a time to provide additional support for students as well as guided reading that was relevant to individual classes or interdisciplinary units. Ms. Munson, the language arts teacher at Pride Alternative, noted

that students were using the RICA course to read the popular children's book, *Harry Potter* by J.K. Rowling. She then indicated that the text would be used to support work that the students were doing in language arts, social studies and science.

In the single-sex schools, the advisory sessions occurred during RICA. As Ms. Norris, the all girls' school principal, and Mr. Henderson, the all boys' school principal, noted previously, this time was used specifically for students to participate in team-building activities, discuss issues based on current events, and participate in community events. Mr. Mangrum, mathematics teacher at Excelsior, specifically used the advisory session to help students develop an understanding of media portrayals of urban students. He noted:

There was an article in the [local newspaper] about all this testing and that it would take 300 years for the 5th grade Black students in our district to be on par with the 5th grade White students on the 5th grade [state assessed] Math exam. So I just let them read that one line. I said, "What does that line mean to you?"... They said, "they're calling us dumb." I said, "No it's not what it's saying at all." They didn't understand that whoever wrote the article is looking at the statistics and that when they started looking at how do we close this achievement gap- it wasn't just about race. It was also about socio-economic. It was about male versus female. And looking at the information that's out there and saying, "Wow, kids that are not on free and reduced lunch pass at an 80% rate. Kids that are on a free and reduced lunch are passing at a 40% rate. We got to change this because otherwise you're just going to have it forever. So the whole discussion for that class period was, "What can we do as a society to try and change this?" (Teacher Interview, March 15, 2012)

This discussion during the advisory session supported Ladson-Billings (1995, 2001) promotion of the sociopolitical consciousness tenet within CRP. Specifically, this discussion afforded Mr. Mangrum the opportunity to help students broaden their lens to critique cultural norms using information they were taught (i.e., mathematics) to

determine how to transform this particular social inequity. However, Mr. Mangrum did miss an opportune time to discuss race. Evans-Winters (2005) notes that part of the self-reflexivity component of teaching girls in the urban school is for teachers to confront their racial beliefs and biases. She notes that by reflecting on these assumptions, teachers can begin to determine how they influence perceptions of ability or the lack of ability in urban students, especially girls, and bring this information to the class discussion.

Ms. Thacker worked with her students to create a community within her classroom. She noted, “I want to see them edge each other and say, ‘I got this’ and [ask their peers] ‘what are you going to do about this (i.e., their work)’ [as opposed] to playing around or play fighting” (Teacher Interview, March 14, 2012). Ms. Thacker strove to build community within her classroom and to maintain the focus on collaborative and collective outcomes for the students. During my observations, Ms. Thacker fostered a community of learners by encouraging students to work together. On one such occasion, Jai, the student who did not participate in this study but was used as a student example, was not attentive, could not focus on his class work, and was being very disruptive to others in the class. After talking to him one on one and after trying to help him focus on the task, Ms. Bennett asked one of the student leaders to work with Jai and his behavior changed immediately. The student leader was able to help him focus his attention on the task and complete the assignment before the end of the period. Ms. Thacker used students to help promote excellence in her classroom.

The development of these communities in single-sex schools is also important to the students. Christina, my lone White student participant, noted that some of the students

that she went to elementary school with were very cruel to her, however, the nature of their relationship changed once they began attending the single-sex school. She added that many of the same young ladies that talked down to her or just ignored her previously were now amongst the many friends she has acquired at the all girls' school. Christina's mother added:

In elementary school, she would come home quite sad and got bullied quite a bit. And, well if you want to be honest, it's because she is not African American and it's predominately [an] African American school which obviously we don't have a problem because we sent her there and we are open-minded. So she got reverse prejudice quite a bit. She seems much happier at this new school and as you see [it] is predominantly African American. (Student Interview, March 5, 2012)

There could be a variety of factors that contribute to the bullying she experienced.

Christina did note, however, that the principal enforces a "no drama" policy which she feels helps maintain a positive school community.

Developing a Strong Identity

The girls develop a stronger academic and social identity than the boys in each of the single-sex schools. While the school provided opportunities for students to develop a positive self-identity, there were external factors that provided difficulties for each of the students. Middle school can be an awkward period of time for many students (Obeidallah, Brennan, Brooks-Gunn, Kindlon & Earls, 2000; Spencer, Dupree, Swanson & Cunningham, 1998; Tanner-Smith, 2009). Compounding the expectations placed by school, teachers, and parents is the biological morphing that begins to shape the personality of an individual. Furthermore, this period typically brings about various

levels of maturity to which some are not ready to adhere. However, this developmental stage seems more complex in the boys' school because of the generalized perception of single-sex schools for boys in particular with regard to their sexuality. The boys' school endured questions regarding the sexuality of the students that attended. Ms. Hardy notes:

It's okay for girls to go to an all-girls' school that's appropriate but boys [if] they do, are going to turn gay. It's a school for gay boys. We fight that every day. (Teacher Interview, March 14, 2012)

As we discuss this issue in more detail, she provided more insight with reference to student behavior.

CB: And do you feel that because of this, this notion that people from the outside are kind of putting on the boys, do you feel that may also explain some of their acting. Not necessarily acting out but acting extra, so to speak?

Ms. Hardy: No doubt, no doubt. You know, having at age eleven to defend your sexuality, or your gender identity, because someone in your family doesn't know any better. Yeah, that would upset me. That would certainly make me not do anything I could to get good attention. Because clearly, bad attention. Okay absolutely you know they put them on guard to have to defend who they are may be for the first time in their lives and that's something for an eleven year old. (Teacher Interview, March 14, 2012)

A point that was further reiterated and expanded upon by Mr. Henderson who noted:

There is the ignorance that's out there that exist among people in our community, as one, this must be guys that are into guys who go to this school or it must be a behavioral school. So again, that's an educational piece that we try to dispel those myths and everything. And that's very difficult for them because their minds are very fragile and they're very impressionistic as well. And so they don't buy in, they won't buy in because of the forces around them that they feel more influenced than here in the building. And that's kind of difficult when you have 3 years at the middle grade to make substantial changes academically, socially, emotionally, that's very difficult for us but we still are optimistic because

we see it working for many of our boys. And the reason, there's a lot of growing research out there that says here's some determinants to why some boys won't attend or will not want to attend an all boys' school and how some parents will not select it as well, because they feel that pressure from their sons many of them being female head of household, no father figure in there. So they are saying, okay well, let me kind of give in to that pressure even though I feel from talking to other people from either visiting myself that this would be a good place for my son, so yeah. (Principal Interview, March 12, 2012)

These points resonated with the student interviews because each student mentioned that others' perception of Scholar Academy often resulted in thinking that the school was "gay." In fact, Kendrick, one of the boys from Scholar, specifically said that he has had to correct his peers and let them know that the school is not gay.

The notion of what it means to be a boy attending an all boys' school did not become significant until I listened to the students talk about how their peers regarded their school and received reinforcements of these notions from the teachers and principal. As I reviewed my notes, I identified where the students most utilized the word gay and how it was one of the most significant insults I heard them call one another. In this school, being labeled gay seemed cause for retaliation of some sort by the students. Mr. Draper added that the boys acted in a certain way to avoid being labeled.

I think they are hyper afraid of being labeled and so they have to be, don't touch me. What are you gay; this is an all boys' school. You can't touch other guys here that is weird. You get that a lot and you hear it over and over... I think they are so afraid of being labeled one way or another probably because of what they are hearing... I have the kids they say the word faggot a lot now. I tell them, I stop them, and I am like that is a word of hate. In their mind they don't even understand that that word is a word of hate because it is probably coming from the outside and they just throw it out there like that is normal talk that you can just say that word freely in any environment and nothing will happen to you and that is something that I am personally really trying to punch into them. So that to

me is like definitely something that I feel like is coming from the outside their brain and they just got to hyper masculine and they are [like] just don't touch. (Teacher Interview, March 14, 2012)

Bracey (2007) notes that school labels, such as being identified as gay, are significantly more common for an all boys' school and often creates a variety of disruptions to learning because the students must resort to defending their identity. Sullivan, Joshi, and Leonard (2010) reiterated that some feared that single-sex schools would actually increase the number of boys considering homosexuality due to their attendance in these schools; Mr. Henderson specifically noted that that quite frequently he addressed the notion that single-sex schools increase homosexuality to parents that were considering the school for their child. All of the teachers indicated that they specifically worked to address the concerns of parents and of students.

Girls Overcoming the Labels

While the boys had to contend with a variety of factors that questioned their sexuality because they attended an all-boys' school, the girls never faced the scrutiny of having to answer questions about sexuality. I observed girls who felt empowered to achieve and who displayed much confidence in their academic abilities. During one observation in Ms. Carlson's class, students received the results of a test and the students that did exceptionally well boasted about their success. However, the other students that did not do as well did not ridicule these students. They began asking them for help on problems they were completing on their class assignment. The female student exhibit pride in achievement; teachers also worked to help students understand that they had the

potential to achieve beyond their own expectations, and helped them develop intellectual curiosity within themselves. Ms. Carlson asserted that she wants her students to think beyond a general answer. I observed a level of boldness amongst the students as they engaged in debates during class to discuss multiple interpretations of the mathematical problems. Students also thought that their teachers were committed to their overall success and development. They expressed that they felt very fortunate to be amongst students that share similar goals.

Coeducational Identities versus Single-Sex Identities

The girls that attend Excelsior develop a stronger identity of the three schools but single-sex schools overall contributed to a stronger academic and social identity. This supports the research of Wills (2007) who notes that students in single-sex classes develop more positive perceptions of themselves. Warrington and Younger (2003) posit that while boys tend to resent single-sex schools, they are more engaged in the learning process. Wills, Kilpatrick, and Hurton (2006) further contend that there are considerable benefits, for both boys and girls, in their overall academic achievement, behavior, social skills and attitudes about school. Most of the students that participated in this study corroborated these findings. Devin, who transitioned to Scholar Preparatory, states that “students are more well-behaved than at my previous middle school” (Student Interview, November 18, 2011) Chris, a student at Scholar Academy, further notes that,

I feel good about going to school [at Scholar Preparatory] because there is no distraction here and I am a student leader...my friends think it would be bad if I had stayed at my old school because of the distraction from the girls. (Student Interview, March 1, 2012)

The students of Excelsior Preparatory expressed some of the same sentiment regarding their experience at the school. Christina and Lisa were so excited to share their experiences that they did not give coherent answers. Lisa began answering the question with an, “Oh My God” (Student Interview, February 27, 2012) and Christina began talking about everything she liked about the school and it all seemed to run together. She began by talking about the rigor of the program followed by the fun that the students have while discussing the commitment of her teachers. Christina did note that:

[The experience] is a whole lot better [than elementary school]...A few students in the building, I actually knew from my old [elementary] school and they are getting along better with other people...sometimes I pass by them in the hallway and they are always being nice [to me]. They are not what they used to be where they were always being mean to me. (Student Interview, March 5, 2012)

Ashley, a transfer student to Excelsior feels teachers give student more attention and the school community makes her feel more involved. Ashley’s mother was happiest that her grades had dramatically improved when she changed schools. Ashley earned a 2.5 grade point average (GPA) at her previous middle school and now maintains a 3.5 GPA and her mother noted that she actually has homework at Excelsior. Devin, also indicated that his grades improved dramatically once he transitioned to Scholar Academy. Devin pointed out that the school creates an environment where students feel that the teachers are concerned about their understanding of learned material. Devin, noted that at his previous middle school, teachers did not check for understanding, nor did they take the time to discern whether their lessons were clear to the students. He noted that his teachers at Scholar Academy take time to help students as opposed to his previous middle school

experience. Devin specifically stated that even though he took notes, he “still [did] not understand the material that was covered [at my previous middle school].”(Student Interview, November 18, 2011)

By comparison, Jermaine, the lone representative of Pride Alternative School, did express that he liked his school primarily because he had friends that attended the school. When asked about his perceptions of single-sex education, he specifically said that his peers told him that the students do not have fun and that there are a lot of fights that occur at the school. While I often heard students say, “I hate this school,” I never saw any fights outside of general horseplay amongst the students.

What immediately became apparent in the answers to questions about the students’ experiences at the respective schools, Scholar Academy and Excelsior attendees discussed academics and how they felt the school was concerned doing well in school whereas Jermaine focused on social aspects. Incidentally, when asked about single-sex education, his mother said she was curious to learn what his impression of the single-sex schools were because she was considering moving him to a single-sex school the following year. When she said that, his facial expression became noticeably sad.

Difficulty Finding Their Way

While most of the students interviewed from the single-sex schools expressed positive experiences with the school, some were not as happy about the school environment and their teachers. Kendrick specifically noted that Scholar Academy overall is a good school but that he does not want to be there. When I asked why he did not want to be there, he initially stated that there are no girls at the school and that there

are a lot of fights. When asked what could be done differently to make this a better learning experience for him, specifically said,

[If] lessons were more interesting. That's the one that gets everybody. 'Cause we sit in class for about 44, I don't know how long, 52 minutes, and we have to sit there, listen to a teacher, teacher lectures and talk and talk and talk, And eventually you're going to get unfocused. You're going to get bored (Student Interview, March 8, 2012).

I did have the opportunity to observe Kendrick in Ms. Thacker and Ms. Hardy's classes at Scholar Academy and each teacher planned activities that did require student movement and collaboration. However, I did notice that he was often disengaged in the learning process. This further supports Warrington and Younger's (2003) assertion regarding the manner in which some boys resent the single-sex mode of education. However, his mother firmly noted that he would stay at the school despite his protests. His mother felt that placing him in the all boys' school would redirect his focus from girls to academics. She expressed that he was a nice looking young man so she did not want him to get caught up with a female student and alter his future with an unwanted pregnancy and child to care for.

By contrast, Keisha expressed concern about her experience at Excelsior, specifically noting that being around all-girls gets on her nerves. She noted that the previous year was not problematic but that this year, it got on her nerves. She also expressed concern with one teacher that she felt did not provide adequate support for her during a particular learning activity. She stated that she did not learn the skills necessary to complete the activity from the previous school year but the teacher was not willing to provide additional support for something that she should already know.

During the course of our conversation, Keisha's mother expressed concern because she was hearing some of her daughter's complaints for the first time. Keisha's mother informed me that she would be attending a new school the following year because she felt that the girl's school needed to work out some things to better support the students, even though she liked the concept of an all-girls' school.

I was able to observe Keisha in Mr. Mangrum's class and when I asked her about her experience in his class, she said she enjoyed it because:

He [Mr. Mangrum] makes me feel more confident as a student...If you don't understand something the first time, you go ask [Mr. Mangrum] questions and do better than you did the first time. [After we take a test] he calls us up one by one and he'll give us the [graded] test and helps us with questions we got wrong. (Student Interview, March 8, 2012)

I did observe this practice and noted it under Mr. Mangrum's pedagogical style.

It Really Is Just About Good Teaching

When teachers utilized culturally relevant teaching practices, they provide greater opportunities for student success and transformation. Lipman (1995) suggests that culturally relevant teachers, "build upon students' cultural and experiential strength to help them acquire new knowledge" (p. 203). I noted that teachers in each of the three environments had greater outcomes from their students when they engaged in culturally relevant teaching practices. When Mr. Mangrum indicated that he often modified the curriculum to align with student experiences and interests, it reminded me of Tate's (1995) summative comparison of Sandra Mason's pedagogy versus traditional mathematics instruction. Mr. Mangrum included many of the outline methods found in Sandra Mason's teaching such as, "formulating questions from problem situations,

connecting mathematics to other disciplines and to the world outside of school, and attempting to implement problem solving strategies” (p. 171).

Ms. Bennett explored student personal interests through the development of creative lessons such as using a pie chart to determine how students spend their day and developing shopping strategies based on understanding and calculating percentages without the use of a calculator. Ms. Bennett continually challenged herself to develop innovative techniques to incorporate more of the students’ culture to help scaffold what they bring with them to the class to what they need to know and how the information is applicable to lives.

Ms. Hardy spends a great deal of time developing course lectures that encourage students to make global connections. She transforms her lessons to essentially take students around the world and then helps the students connect what they are learning to what they know about the world around them. Ladson-Billings (2009) notes that this particular practice is the teacher connecting the students’ community, national, and global identity. Further, Gibb, Ferguson, and Horwood (2008) suggest that single sex schools provide strong academics and coeducational schools provide strong student development, good schools are good schools in the final analysis.

Summary

Each of the schools had unique personalities and presented opportunities to dissect and scrutinize what occurred in each building, however, portraiture specifically searches for the good that exists in the school as opposed to searching for opportunities to

denote failure (Lawrence-Lightfoot & Davis, 1997). I sought to present what I saw in a manner that represented the teachers whom I encountered during my research.

Through this study, I was able to apply Noguera and Fergus' (2010) strategies that define single-sex schools for Black and Latino boys and Evans-Winters' (2005) suggestion that urban teachers utilize Critical Urban Pedagogy for girls. The single-sex schools were more aligned to characteristics of Fergus and Noguera's research, although there were elements of Evans-Winters research present. Due to observation limitations at the girls' school, I was only able to fully examine the strategies in the boys' school. The strategies were present in the girls' school; an opportunity to examine and compare the boys' and girls' programs would have assisted with the overall assessment of the single-sex educational environment.

Teacher pedagogical practices presented a variety of methods that essentially placed the student at the center. While culturally relevant pedagogy was used as a tool of analysis, it was not presented as a treatment nor was it expected that teachers understood how to incorporate CRP's three tenets. CRP was used to merely illuminate what was there and to provide methods to develop strategies for change. All of the teachers showed interest in the students' academic achievement and many utilized cultural competence to broaden the scope of instruction they delivered to the students; most, however, were not able to demonstrate sociopolitical consciousness in their teaching.

There were four themes that surfaced in the observations and interviews. The first theme noted that the pedagogical practices of single-sex and coeducational teachers were not drastically different, however, the environment provided opportunities for the

teachers to develop a different type of community when compared to the coeducational environment. The second theme noted that girls developed a more positive academic and social identity than boys. The boys encountered a great deal of scrutiny regarding their sexuality, which led to the development of a hyper masculine persona by some and a resistance to the educational environment by others. The third theme suggests that overall identity of students in single-sex schools is stronger than those in coeducational schools. While I was only able to interview one student in the coeducational setting, I did observe student interactions in class and in the hall and noticed that students experienced more difficulty establishing their academic identity. There were not as many visible celebrations from students when they received a good grade. The final category posits that culturally relevant teaching practices suggests greater academic outcomes from students than traditional teaching methods or brain science teaching strategies.

Chapter 5: Summary, Discussion, Recommendations, and Conclusion

Summary

The purpose of this study was to examine the single-sex initiative and understand how these environments purport to address the academic identities of the students. Additionally, this study was designed to understand the pedagogical practices of teachers in single-sex schooling environments as compared to traditional coeducational teachers. This research contributes to the function of single-sex schools in the urban context. While there has been significant interest in the topic of single-sex education in urban schools, there is a dearth of relevant research that seeks to understand how schools attempt to address the individualized learning needs of students in these separate learning environments and that outlines pedagogical practices that are relevant to the urban school population.

I specifically used the naturalistic inquiry method of portraiture to develop a portrait that adequately affords the reader an opportunity to vividly picture each of the respective learning environments. Lawrence-Lightfoot and Davis (1997) specifically note that this methodological approach “is likely to absorb a very different reality than the one who is on a mission to discover the sources of failure” (p. 9). While portraiture was used as the methodological approach, culturally relevant pedagogy (CRP) provided a theoretical framework for analysis of each of the learning environments. Ladson-Billings

(1995) notes that CRP is, “a pedagogy of opposition” that is “committed to collective empowerment” (p. 160). Ladson-Billings (2009) also notes that CRP incorporates student culture to maintain it and use it “transcend” the dominant culture’s negative views and effects.

The findings reported in chapter 4 were gathered through data collected from observations, field notes, and individual interviews. The findings reveal that pedagogical practices of the teachers used for this study did not differ. In fact, the teachers in the single-sex school presented material in a very similar fashion to the teachers I observed in the coeducational settings. Six of the teachers felt there were definite benefits to establishing separate learning spaces for boys and girls and one teacher felt that separate spaces were not necessary if the teacher was committed to excellence. The findings also indicate the student identity, in regard to academics and socialization, was higher for the girls than for the boys. However, the overall academic identity and socialization was better for the students that attended the single-sex schools as opposed to the coeducational schools. Finally, the students responded more favorably to instruction from their teachers when they incorporated culturally relevant teaching practices. This was evident in all research sites. While the single-sex schools used brain-based research to provide rationales for operation and examples for lesson development, it was the incorporation of culturally relevant practices that produced the greatest impact on student learning.

Discussion

This section is organized to capture and discuss the findings based on four themes that emerged from the data: 1) the pedagogical practices of the teachers in each environment were not significantly different 2) the girls developed a stronger identity in the single-sex environment than the boys 3) students attending the single-sex schools developed a stronger academic and social identity than their coeducational counterparts and 4) culturally relevant pedagogical practices provide the greatest measure of success for the teachers in both environments.

More or Less the Same

Through my observations, I soon realized that classrooms and lessons were not drastically different between the two schools. While some of the lessons I observed in the boys' school did seem to incorporate more physical movement, the lesson could have been transitioned to any learning environment and produce similar results. What was significant was how single-sex schools developed a learning community that promoted excellence and created opportunities for team building and mentoring to occur. Additionally, the boys' and girls' schools developed an advisory session to give students the opportunity to talk openly and freely about issues they were encountering as well as those that were present at the global level.

The teachers in the single-sex schools specifically used the community in their pedagogy to promote their learning expectations and develop what Ladson-Billings (2009) refers to as "community of learners" (p. 60). Each of the five teachers in the single-sex schools allowed students to work with other students that were not clear on

concepts that were being taught or students that were in need of additional support. On several occasions, students asked their peers to assist them on various tasks. The teachers did not discourage students from assisting other students, as they wanted students to use all of their resources to help them succeed. Teachers encouraged students to work collaboratively.

In the coeducational school, I observed that many students in Ms. Munson's class were discouraged from talking during class unless it was relevant to the lesson. Ms. Munson actively sought to maintain order in her classroom. Conversely, Ms. Bennett did promote a community of learners much like the single-sex schools. She allowed students to work cooperatively and often allowed them to lead discussions to help their peers understand various mathematical concepts.

Gurian and Stevens (2011) outline a variety of suggestions to promote an enhanced learning experience that caters to the specific learning needs of boys and girls. While the strategies promote tools for teachers to be more effective, such as understanding hormonal differences, developing lessons that incorporate character education, and maintaining high expectations, it was clear that the culture of the environment was more beneficial than any of these particular learning strategies.

Girls are More Free to Be than Boys

The most drastic difference between the boys' school and girls' school was the behavioral issues. Middle school is challenging for most students. I personally remember how much of a challenge I was to my teachers and parents 20+ years ago. Therefore, I understand how puberty may influence perceptions. I did not expect to observe classes

where teachers did not experience behavioral challenges and class disruptions. However, the boys' school presented more behavioral challenges than the girls' school and the coeducational school. Of significant interest is the notion that some of the boys were acting out due to their own resistance to the boys' school. While the number of resistant young men was relatively small in number, they provided a great deal of disruption to learning. Warrington and Younger (2003) note that the boys in their study resented single-sex education. Ms. Thacker encountered the greatest number of observed outbursts from students. On a few occasions, I heard students say that they hated this [the boys'] school. Some boys' even acted out in hopes that they would be removed from the school.

Another factor that seemed to influence behavioral issues for the boys was notions of sexuality. In each of the interviews with the students from the boys' school, participants specifically noted that their peers questioned why they would want to attend a school with all boys. Ms. Thacker indicated that during the advisory session, boys speak openly about how family members and peers question their attendance at the all boys' school. All of the teachers in the boys' school noted that this was a reality that they were faced with as they move forward and indicated that it may be a contributing factor to the lower enrollment numbers in the school. Ms. Hardy indicated that defining their sexuality is a difficult thing for boys to deal with at this age. As a result, I noticed that some of the boys developed a hyper masculine persona to possibly combat the stigma that others held about single-sex schools for boys specifically. The traditional male bravado was bigger and the play fighting was more intense.

In relation to their academic identity, the girls exhibited a stronger image of themselves because they were encouraged to be successful and received positive reinforcement for their class efforts. Wills, Kilpatrick, and Hurton (2006) note the girls in their study made significant gains in self-assurance and confidence. The school developed high expectations for all students and when students were successful with learning tasks, they displayed pride in their accomplishments. The teachers at the girls' school indicated that the behavioral problems that existed stemmed from students that were not able to maintain the expectations of teachers and the school overall. They sought attention by causing issues to cover their own insecurities. Each teacher observed at the single-sex schools sought to diffuse potential issues that caused any disruption to learning for other students.

Every Boy Grows to Be His Man and Every Girl Grows to Be Her Own Woman

While single-sex schools experienced differences in the way that identity is developed, the schools supportive environment provided ample opportunity to support pride and excellence for the students. The teachers worked diligently to promote pride in education. Ms. Thacker often talked about their future and how the information they are learning is the foundation for their goals. Mr. Draper often spoke about how they are learning skills that will eventually encourage their exploration into a variety of careers that require specific educations. Ms. Carlson effectively manages to place students interests in the forefront of her classes.

In the coed school, I observed that students in Ms. Munson's class were not as driven towards academic success as those in the single-sex classes. I also noticed that

some students were more focused on how others viewed them as opposed to their own growth and identity development. In Ms. Bennett's class, the students did seem to exhibit a stronger academic identity. Ms. Bennett also was more successful at developing lessons that engaged learning and encourage success.

What single-sex schools were very successful at doing was promoting positive self-images for the students to develop as well as an environment where they were not as driven to impress their classmates. The schools also provided opportunities for students to express their feelings, emotions, and any issues they were encountering during the advisory session. This not only gave students the opportunity to share their thoughts, feelings, and emotions, but it provided the teachers an opportunity to get to know the students more intimately. Ms. Carlson specifically spoke of one incident during her homeroom where students were obviously upset by something and she took the time to talk to them even though it interfered with their next class period. The single-sex schools focused on how best to help students explore their academic and social identity to help them develop and define the growth into becoming a man and a woman.

It's all About How Much you Know Individually Not Collectively

What was evident was that teacher's that utilized more culturally relevant teaching practices were more successful. Ladson-Billings (2009) notes that culturally relevant teachers use student culture to maintain it and transcend negative representations that are often associated with the student's culture. Ladson-Billings (1995) further contends that teachers continually strive to help students challenge status quo expectations placed on them by the hegemonic architects of education. While the single-

sex schools use foundational studies that suggest girl and boy brains (Gurian and Stevens, 2011; Sax, 2005) develop differently thereby making it necessary to use different learning strategies to enhance their educational experience, they fail to connect the cultural component of student learning. Hubbard and Datnow (2005) specifically note that research on single-sex education has not accounted for such things the social, economic, and cultural context of the student, which has resulted in disconnect between school, family and academic achievement.

While brain-based researchers present activities and strategies for supporting learning environments that encourage growth and development, they neglect to incorporate an understanding of individual student needs. Brain science researchers provide an extensive snap shop of the general male and female population of learners while Ladson-Billings looks specifically at the individual learning needs of students and scaffolds what they know to help them move to what they need to know. Culturally relevant teachers are challenged to create a classroom atmosphere that addresses high expectations, transformative learning, and the representation of the student in what they are learning. What is more significant is that the learning strategies of brain science can be realigned with those of a culturally relevant teacher. The significant difference is that the culturally relevant teacher is invested in what each individual child brings with them to the classroom that to provide a rich learning environment while the brain science educator looks at specific learning goals and traits based on gender and not culture. Teachers appear to be more successful in single-sex schools when they are able to connect with their students individually. The students often were more invested in what

they were learning when their life, experience, and interest were significant to the learning and teaching process.

Review of Research Questions

At the onset of this research, there were two questions that guided my inquiry. The first question specifically targeted the pedagogical practices of the single-sex teachers and how they compare to their coeducational counterparts. The answer is that there were no significant differentiating features of the two pedagogical styles. The teachers in the single-sex schools did base some of their teaching on suggestions by Gurian and Stevens (2010) and Sax (2005) in their approach to working with the students but the actual delivery of instruction and the how the information was presented was not significantly different from their coeducational counterparts. The data suggests, however, that the development of a community in the single-sex schools was more prominent than the pedagogical practices of the teachers.

The second research question inquired about student identity with regard to academics and socialization. The data suggests that boys deal with more complex issues with regard to their socialization at the boys' school. The primary issue was questions about the boys' sexuality as interpreted by peers and family members. The girls, as Parker and Rennie (2002), Wills, Kirkpatrick, and Hurton (2006) and Singh, Vaught, and Mitchell (1998) note, display higher levels of achievement and socialization than boys. However, due to the small sample size of students, this question is inconclusive and

needs further development through additional research. Therefore, the answer is currently incomplete.

Implications

Single-sex education has grown exponentially since NCLB modified Title IX legislation effectively allowing schools to develop schools that admitted students based on gender. Fergus and Noguera (2010) note that in 1999, there were 4 public schools that offered single-sex education compared to 223 in 2006. However, these schools have been developed with very little empirical data that examines their effectiveness and essentially is unable to present answers regarding the effectiveness of single-sex schools. Bracey (2007) specifically calls for research that can be used to guide the development of single-sex schools by educators and policymakers and Fergus and Noguera (2010) specifically note that research supporting the separation of boys from girls [and vice versa] is inconclusive. Brain science researchers (Gurian & Stevens, 2010; Sax 2006) have used knowledge about brain development to promote the notion that boys and girls learn differently. However, reputable neuroscientists (Eliot, 2010, 2012) refute the claims and contend that brain science researchers amplify what is not really there.

When I designed this research study, I knew that I wanted to conduct a qualitative study because I felt it would provide further insight to the single-sex movement. Hubbard and Datnow (2005) contend that qualitative studies tend to, “yield a deeper and more complete understanding of these [single-sex] schools” (p. 118). Through portraiture, I was able to develop a picture of what was present in each of the schools and connect it to

themes that provide insight to my research questions. Therefore, the following are recommendations for future research and implementation.

Develop Effective Learning Strategies Based on Effective Teachers

Much like Ladson-Billings (1995a, 1995b, 2001, 2009) research on culturally relevant pedagogy, there should be a line of research that examines best practices based on pedagogical approaches and not generalizable principles designed to provide overarching themes based on gender and not individual students. Effective teachers are aligned with individual learning needs of students and often provide multiple approaches to a subject or lesson to help enhance the learning experience of their students. I distinctly remember how different my teaching was when I began to learn more about my students and their specific learning needs. I also remember how my lessons evolved when I developed them based on student experiences and not based on typical behaviors and desires of students.

During my observations, I often noticed that student engagement was closely associated with the teacher's efforts to design lessons that connected student's interest, background, and culture to what they were learning about. There were several students at each school that I had wished to have an opportunity to talk with about their experiences but was not able to do so. However, I did note how their engagement changed when their teachers took an individualized interest in their learning outcomes. At the boys' school, I noticed one student that seemed to goof off every time I observed Ms. Thacker's or Ms. Hardy's class. He was not a nuisance but rather lacked focus. He would often walk around the classroom, talk to his classmates or tease other students in the class. However,

his behavior was not as disruptive as other students and when asked to return to his seat and he obliged. He often entertained himself and seemed to be in another world. That seemed to change the day Ms. Thacker escorted her students to the computer lab to complete an assignment that required students to create a FaceBook page for a historical figure from the Roman Empire. I immediately noticed that he was actively engaged in the assignment and spent the entire class period focused on completing the assignment. He did not talk to a single student during this period unless they needed assistance with their own assignment. His behavior was transformed and his focus had shifted. During another class with Ms. Thacker, she was leading a discussion on dinosaurs, and he was able to not only answer her questions, but he added insight and additional information to what she was presenting.

At the girls' school, Ms. Carlson often talked to her students and gathered information from them as she walked around the classroom to offer assistance on assignments or general questions the students had. After gathering information, she would often use the information in her next lecture and the students often looked surprised. They were oblivious to the fact that she had gathered the information during a previous class. She allowed the students to talk in a non-disruptive manner while they did work in her class. Students were always happy to share personal information with Ms. Carlson and she was more than willing to oblige them by providing a listening ear and then transforming their lives into relevant lessons for her mathematics and science lectures.

At the coeducational school, Ms. Bennett worked diligently to incorporate her student's culture and interest into her lesson plans. By her own admission, she felt this was something she struggled with but she was one of the strongest teachers I observed during this study. She incorporated dance to help students learn about different types of lines (i.e., parallel, perpendicular, etc) and she willingly modified her teaching if she felt students were not understanding the concepts she was presenting. She placed a great deal of responsibility on herself regarding learning outcomes.

Therefore, I assert that research must determine what are the effective teaching strategies of teachers in single-sex classrooms.

Align Brain Based Research With Culturally Relevant Teaching Practices

Based on my reading and understanding of brain-based research and how it identifies specific learning strategies for boys and girls, there is a definitive gap that overlooks the cultural piece associated with each individual child. While brain-based strategies offer opportunities to approach subject matter differently, culturally relevant practices, when fully engaged by the teacher, offers opportunities to transform learning for students. Therefore, I have outlined five suggested methods that Gurian and Stevens (2010) encourage teachers to implement that teach in single-sex environments and align it with an appropriate culturally relevant practice that Ladson-Billings (2009) identifies in her portraits of culturally relevant teachers. Table 5.1 outlines those comparisons.

Table 5.1. Aligning Brain-Based Learning With Culturally Relevant Teaching Practices

Gurian and Stevens	Ladson-Billings
<p><i>Teach character education across the curriculum and focus on “hard” values such as respect, honesty, and integrity (p. 171).</i></p> <p>While self-esteem is valued as an important component of student development, they present contend that schools tend to focus on this “soft” value and they need to incorporate more of the “hard” values to help students develop a stronger self-esteem. While important, the development of these values do not speak to how the teacher is modeling these values outside of teaching them to the students.</p>	<p><i>Culturally relevant teachers have high self-esteem and high regard for others (p. 37).</i> These individuals view their profession with high regard and make concerted efforts to present themselves in a professional manner. Based on their example and commitment to the teaching profession, students become transformed by these teachers and promote a desire to emulate them. The development of respect, honesty, and integrity begins with the teacher and how they connect to the profession, their students and the community. Additionally, teachers provide examples of expected behaviors.</p>
<p><i>Innovations for teaching languages arts (for boys) and math and science (for girls) (p. 243).</i></p> <p>The authors contend that boys tend to not have as advanced skills at the middle school level due to differences in brain development and function when compared to girls and their abilities in language arts. They also contend that girls experience more difficulty in mathematics compared to boys. They assert generalities based on gender.</p>	<p><i>Culturally relevant teachers help students develop necessary skills (p. 104).</i></p> <p>With regard to knowledge, teachers are encouraged to scaffold what students bring with them to class and transform that to what they need to know as opposed to developing a preconceived notions of what students bring with them to class and giving little effort to teaching those that do not have the necessary skills. Culturally relevant teachers focuses on the individual student’s learning needs.</p>
<p><i>Bonding and Attachment (p. 222).</i></p> <p>The authors discuss the importance of developing relationships based on trust to handle the changes that middle school students face in regard to self-esteem, emotional stresses, humiliation, social skills, and maturity.</p>	<p><i>Culturally relevant teachers demonstrate a connectedness with each of their students (p. 72).</i></p> <p>Teachers work to develop individual relationships with each of their students as opposed to individual students. They spend time learning about each student and work to develop common interests with them.</p>
<p><i>Utilize group work (pp. 262-263).</i></p> <p>The authors feel that this alternative method allows students to learn from one another and develop further understanding.</p>	<p><i>Culturally relevant teachers encourage a community of learners (p. 74).</i></p> <p>Teachers help students understand the importance of regarding their classmate’s achievement as highly as their own. The goal is to dispel the idea of “competitive individualism.”</p>
<p><i>Training in hormonal and adolescent brain development (p. 208)</i></p> <p>The authors emphasize the proposed differences in brain development and hormones for middle school level students. Specifically, they discuss how hormones lead to students acting certain ways in school. They promote understanding how students function biologically and develop lessons that engage these differences.</p>	<p><i>Culturally relevant practices help students make connections between their community, national, and global identities (p.52).</i></p> <p>This particular practice requires that teachers make the diverse cultural backgrounds students exhibit central to the learning process.</p>

While there are more examples of ways that culturally relevant pedagogical practices can be aligned with brain-based research instructional ideas, I specifically chose practices that I saw in the field. The single-sex schools were very focused on the type of character they wanted students to aspire to become. However, the important component to obtain these characteristics relied on the manner by which the teachers exemplified what they expected from their students. Ms. Thacker demonstrated integrity through her appearance. She was always professionally dressed and often wore skirts or dresses with heels. She took pride in her appearance, which let her students know how important they were to her and how serious she was about teaching.

Equally important to all the teachers was taking what students knew and expanding their knowledge to incorporate what they needed to know. Ms. Carlson took time to determine how she could broaden the connection between what students knew and what they needed to learn. Ms. Carlson pushed herself to develop a class that did not make her students feel as though they were remedial and the students responded with a desire for excellence in the work they presented in class.

Bonds are important elements of success for a teacher. However, connecting with students beyond general trust is critical to overall teacher effectiveness. Ms. Hardy, the social butterfly of the teachers in this study, knew so much about her students that it amazed me how she kept all of the information in her head. She knew about their home culture and often spent time connecting with her students one on one.

The single-sex schools utilized a variety of groups to help foster community within the classroom as well as support the theme of community in the school. Students

were often called upon to collaborate, support, and encourage one another. Ms. Thacker often relied on students to provide additional support as she worked with other students in the class. The student helpers took their roles very serious and were more successful than Ms. Thacker when working with disruptive students.

Finally, while the teachers in the single-sex schools understand brain-science concepts as well as perceptions regarding student-learning differences, they were more aligned with the cultural aspects that students brought to class with them. Mr. Mangrum specifically developed a variety of math lessons based on life applicable problems that encouraged students to consider the solution based on their experiences.

Conclusion

When I began this research study, I wanted to know if single-sex schools are viable options for students, especially those that look like me. While this portrait is ongoing, what is apparent is that these environments are effective not because of specific brain research that provides a rationale for their existence, but rather the dedication of committed teachers, parents and students that seek to be in this environment. This study considers single-sex school from the urban context with specific attention given to pedagogical practices. This study also moves from quantifiable measures as the standard method of interpretation to determine the how single-sex schools purport to address student academic and social identity. The single-sex model is not for every student but like any other educational environment it is most effective when the commitment of those attending and those in faculty and administrative roles provide a learning environment that allows students to explore their academic and social identity.

The pedagogical practices of single-sex teachers were not drastically different than those of the coeducational teacher in this study. What did appear to be most effective was the level of cultural relevance that teachers practiced when teaching and interacting with their students.

Student identity was closely linked to schooling environment. The girls' school exhibited the strongest identity, with boy's school following and the coeducational school thereafter. While each school strives to help students develop positive identities at the academic and social levels, the single-sex schools presented a greater opportunity for the development and support of a community of scholars.

Further research is needed to develop implementation strategies for the opening of future learning environments that use gender as the primary admission criteria. With the popularity of single-sex schools growing in urban school districts, parents need to be equipped with research that identifies the types of students that function best in a single-sex versus a coeducational learning environment and how these schools address specific needs of learners. While the nature versus nurture debate has existed for as long as modern science began analyzing what makes us different, it does not negate the fact that good teaching is the most essential component of student success. In an effort to revisit my original research questions, relevant research, and my findings, I prepared the following executive summary as if I were writing to the superintendent to capture my concluding thoughts.

Dear, Central City Superintendent:

I am appreciative of the time that I spent with in your school district to

learn more about Scholar Academy, Excelsior Preparatory, and Pride Alternative Middle schools. As I reflect on my time in the field, I specifically want to discuss what I learned and what I recommend for future development and continual growth in five specific areas. They are: 1) pedagogical strategies and professional development; 2) curriculum in the school; 3) recruitment and admission of students; 4) recruitment of teachers and profile of a good teacher candidate; and 5) structure of the schools.

Each of the single-sex schools rely on the brain-based research initiative that examines the inherent differences between boys and girls based on notions that each brain develops differently. However, Eliot (2009) posits that these differences are over exaggerated and that they prey on the imagination of adults that feel the outcomes are reputable because neuroscientists have conducted these studies. Gurian and Stevens (2010) outline a variety of methods that provide assistance for teachers when developing lessons specifically geared towards or that seek to be inclusive of the learning styles associated with boys and girls. Gurian and Stevens (2010) also outline strategies for single-sex schools that include character development, discipline practices and bonding and attachment activities. They align these goals with research that examines the differences between boy and girl brains. Eliot (2009) notes that their claims have been extrapolated from single test research studies on adults and rodents. Eliot (2009) further contends that their foundation is not based in neuroscience. Eliot (2009) suggests that differences have more to do with the socialization of boys and girls

as opposed to the brain development. Bracey (2007) contends that this line of brain-based research is contradictory and weak. Bracey (2007) notes that schools rely on this research that is merely based on generalizations and inferences. Therefore, it is advantageous to consider shifting from brain-based research and consider alternatives that better align with the population that you are serving in each of the respective schools. Culturally Relevant Pedagogy has presented viable and effective teaching practices for urban schools. Ladson-Billings (1995a, 1995b, 2001, 2009) outlines three tenets that are associated with this specific teaching practice. The first is academic success which each of the teacher participants in this study possess. Ladson-Billings (2009) notes that academic success is specifically about student learning as opposed to student success. This was very evident in Ms. Carlson's class, a teacher at Excelsior, as she encouraged students to work towards answering the problem. She encouraged their learning and exploration of the math problems she presented. The second tenet is cultural competence, which some of the teachers utilized effectively in their instruction. Ladson-Billings (1995a) specifically notes that teachers use the student's culture as a part of learning. Ms. Bennett, teacher at Pride, created assignments that required students to examine their life in relation to mathematical concepts such as how they spent their time throughout the day and transferring it to pie graphs. The third tenet is sociopolitical consciousness, which, Ladson-Billings (1995a) notes, is the critique of cultural norms, values, and institutions that produce and maintain social inequities. While this particular

tenet was rarely if ever observed, single-sex schools have an opportunity to challenge gender stereotypes, patriarchy, and sexuality. Scholars (Brown, 2009; Delpit, 2006; Evans-Winters, 2005; Teel & Odibah, 2008) have used a variety of methods to challenge the status quo and insert relevant teaching strategies to discuss race, gender, class, sexuality, and culture while providing teachers the tools to effectively teach these areas. However, the central praxis for instruction, I recommend, should be Culturally Relevant Pedagogy because it moves from the generalized perspective Gurian and Stevens (2010) and Sax (2005) promote to one that scaffolds learning by incorporating the individual student and moving the student from where they are to where they need to be while retaining the individual cultural perspective and allowing the student to contribute to the transfer of knowledge through their own cultural lens. In addition to the work of Ladson-Billings and Culturally Relevant Teaching, it is also valuable to consider Gay's (2010) scholarship on Culturally Responsive Teaching, Irvine's (2003) scholarship that seeks to prepare teachers for diversity, and Sleeter's (2005) that provides useful outlines to transition standards-based curriculums to be more diverse and multicultural.

As you begin exploring these alternatives to brain-based education, there will be a natural shift in the curriculum within the school. While teachers will continue utilizing district pacing guides, they will be equipped with the knowledge to adapt the curriculum to be more aligned with the culture of the students represented. Ladson-Billings (2009) notes that Culturally Relevant Teachers are

passionate about content and that they help students develop necessary skills to be successful academically and culturally.

While it is difficult to predict what parents and students will chose with regard to school enrollment, I believe it is imperative to continue recruitment efforts to continue building the student population in each school. However, I encourage you to develop an admission process that will allow the principals the opportunity to focus on developing their respective schools. Like any elite private school, college or university, admissions offices contribute to the overall perception of the school. While these schools specifically serve the Central City and they are part of the public district, there is an opportunity to establish a reputation of excellence by identifying characteristics that are aligned with success and provide each school with a liaison that meets with parents and potential students to convey the defined characteristics established by each school. It would also be beneficial to define the characteristics of the ideal student for the single-sex schools by capturing the voice of the principals, teachers, parents, and students.

The fourth component is teacher recruitment. As you begin to identify teachers that will work in these environments, it is essential to develop a rubric that outlines specific traits that these teachers should possess. Ladson-Billings (2009) outlines a variety of practices that Culturally Relevant Teachers have in multiple areas of education. Additionally, Evans-Winters (2005) and Fergus and Noguera (2010) support Ladson-Billings characteristics when they speak of

schools and classrooms that are specifically designed for boys and girls. Each of them contends that Culturally Relevant Teaching must be present.

Finally, the school structure seems to be working based on observations. Some modification I suggest would be to make the time between class periods longer for girls. As of now, they are given one minute to pass classes, which can be conveyed as being repressive. The advisory period seems to provide the students an outlet from the structured academics. I would encourage you to consider training in the area of sexuality so that it can be addressed during the advisory period. The attendees of the boys' school indicated that they endure pressure from peers and family members that question why they chose to attend a single-sex school. It is difficult to imagine the complex emotions that some students may be encountering by having to answer questions regarding their sexuality at such a young age. Conversely, the girls' school may be experiencing resistance due to the pressure to be ladies. Morris (2007) notes that the assertive nature of Black girls contributes to their academic success. Morris (2007) also notes that when girls acquiesce to become the "hegemonic model of womanhood" (p. 511), it counteracts their assertive nature, which contributes to their academic success. Therefore, it is imperative the school culture work to balance uniformity with individuality. Evans-Winters (2005) specifically notes the cultural aesthetics of girls in urban schools reflect a broad range of styles. Students should be given the opportunity to express their individuality.

Overall, I believe that the single-sex schools provide great communities for the students to explore and learn. I do believe it is imperative for them to develop opportunities to combat patriarchy, what it means to be a man, and status quo learning and socialization (Evans-Winters, 2005; Fergus & Noguera, 2010; Ladson-Billings, 1995a, 1995b, 2001, 2009). While single-sex schools in urban school districts continue to find their identity, they must contend with what individual students bring with them to the classroom as opposed to the overgeneralization of a gendered population. Brain-based research maintains a hegemonic status quo that groups learners in two categories: male and female. Culturally Relevant Pedagogy provides multiple categories that offer individualized instruction based on student needs and culture, maintenance of cultural practices incorporated into lesson development, and the transformation of knowledge that challenges the hegemonic control and bias present in public education. As the schools move forward, I encourage you to consider these suggestions.

Reference List

- (2009). Boston Latin school. Columbia Electronic Encyclopedia, 6th Edition.
- Baker, D.B., Riordan, C., & Schaub, M. (1995). The effects of sex-grouped schooling on achievement: The role of national context. *Comparative Education Review*, 39, 468-482.
- Baxley, T., & Boston, G. (2009). Classroom inequity and the literacy experiences of Black adolescent girls. *Education & Society*, 27(2), 77-89.
- Blake, J. J., Butler, B. R., Lewis, C. W. & Darensbourg, A. (2011). Unmasking the inequitable discipline experiences of urban Black girls: Implications for urban educational stakeholders. *Urban Review*, 43, 90-106.
- Bracey, G.W. (2007). *The sources of single-sex education is still unproven*. Education Digest, 72(6), 22-26.
- Brown, R. N. (2011). *Black girlhood celebration. Toward a hip-hop feminist pedagogy*. New York, NY: Peter Lang
- Brown, F. & Russo, C. J. (1999). Single-sex schools, the law, and school reform. *Education and Urban Society*, 31(2), 144-157.
- Buchmann, C., DiPrete, T., & McDaniel, A. (2008). Gender inequalities in education. *Annual Review of Sociology*, 34(1), 319-337.
- Buendia, E. (2011). Reconsidering the urban in urban education: Interdisciplinary conversations. *Urban Review*, 43, 1-21.
- Cahill, L. (2012, Summer). His brain, her brain. *Scientific American Mind*, 21(2), 4-11
- Collins, P.H. (1990/2000). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. New York, NY: Routledge.
- Cousin, G. (2005). Case study research. *Journal of Geography in Higher Education*, 29(3), 421-427.
- Delpit, L. (2006). *Other people's children: Cultural conflict in the classroom (2nd ed.)*. New York, NY: The New Press.
- Denzin, N. K. & Lincoln, Y. S. (2005). *The sage handbook of qualitative research (3rd ed.)*. Thousand Oaks, CA: Sage Publications.
- Dixon, A.D., Chapman, T. K., & Hill, D. A. (2005). Research as an aesthetic process: Extending the portraiture methodology. *Qualitative Inquiry*, 11(1), 16-26

- Evans-Winters, V. E. (2005). *Teaching black girls: Resiliency in urban classrooms*. New York: Peter Lang Publishing.
- Eliot, L. (2009). *Pink brain blue brain: How small differences grow into troublesome gaps and what we can do about it*. New York, NY: Houghton Mifflin Harcourt.
- Eliot, L. (2012, Summer). The truth about boys and girls. *Scientific American Mind*, 21(2), 12-19.
- Farrell, A. D., Erwin, E. H., Allison, K. W., Meyer, A., Sullivan, T. Camou, S., Kliever, W., & Esposito, L. (2007). Problematic situations in the lives of urban African American middle school students: A qualitative study. *Journal of Research on Adolescence*, 17(2), 413-454.
- Fergus, E. & Noguera, P. (2010). Theories of change among single-sex schools for Black and Latino boys: An intervention in search of theory.
http://steinhardt.nyu.edu/scmsAdmin/media/users/eaf7/An_Intervention_in_Search_of_Theory_Research_Brief.pdf
- Ferguson, A. A. (2001). *Bad boys: Public schools in the making of black masculinity*. Ann Arbor, MI: University of Michigan Press.
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice (2nd ed.)*. New York, NY: Teachers College Press.
- Gibb, S., Fergusson, D., & Horwood, L. (2008). Effects of single-sex and coeducational schooling on the gender gap in educational achievement. *Australian Journal of Education*, 52(3), 301-317.
- Gillibrand, E., Robinson, P., Brawn, R., & Osborn, A. (1999). Girls' participation in physics in single sex classes in mixed schools in relation to confidence and achievement. *International Journal of Science Education*, 21(4), 350.
- Glesne, C. (2006). *Becoming qualitative researchers: An introduction*. Boston, MA: Pearson Education, Inc.
- Gurian, M. & Stevens, K. (2011). *Boys and girls learn differently: A guide for teachers and parents*. San Francisco, CA: Jossey-Bass
- Hancock, D. R. & Algozzine, B. (2006). *Doing case study research: A practical guide for beginning researchers*. New York, NY: Teachers College Press.
- Hanson, L. S., Walker, J., & Flom, B. (1995). *Growing smart: What's working for girls in schools*. Washington, DC: The Foundation
- Harper, B. (2007). The Relationship Between Black Racial Identity and Academic Achievement in Urban Settings. *Theory Into Practice*, 46(3), 230-238.
- Haynes, N., Comer, J., & Lee, M. (1988). Gender and achievement status differences on learning factors among Black high school students. *Journal of Educational Research*, 81(4), 233-237.
- Hefflin, B. R. (2002). Learning to develop culturally relevant pedagogy: A lesson about cornrowed lives. *The Urban Review*, 34(3), 231-250
- Hoffman, B., Badgett, B., & Parker, R. (2008). The Effect of single-sex instruction in a large, urban, at-risk high school. *Journal of Educational Research*, 102(1), 15-36.
- Hopkins, R., (1997). *Educating Black males: Critical lessons in schooling, community,*

- and power*. New York, NY: State University of New York Press.
- Howard, T. C. (2001). Telling their side of the story: African-American students' perceptions of culturally relevant teaching. *The Urban Review*, 33(2), 131-149.
- Hubbard L. & Datnow, A. (2005). Do single-sex schools improve the education of low-income and minority students? *Anthology and Education Quarterly*, 36(2), 115-131
- Irvine, J. (2003). *Educating teachers for diversity: Seeing with a cultural eye*. New York, NY: Teachers College Press
- Isom, D. (2007). "Performance, resistance, caring: Racialized gender identity in African American boys. *The Urban Review*, 39(4), 405-423.
- Jackson, C., & Smith, I. D. (2000). Poles apart? An exploration of single-sex and mixed sex educational environments in Australia and England. *Educational Studies*, 26, 375-391.
- Kerr, B., & Robinson Kurpius, S. (2004). Encouraging talented girls in math and science: Effects of a guidance intervention. *High Ability Studies*, 15(1), 85-102.
- Ladson-Billings, G. (1995a). But that's just good teaching! The case for culturally relevant pedagogy. *Theory Into Practice*, 34(3), 159-165.
- Ladson-Billings, G. (1995b). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3). 465-491
- Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco, CA: Jossey-Bass.
- Ladson-Billings, G. (2006). Yes, but how do we do it? Practicing culturally relevant pedagogy. In J. Landsman & C. W. Lewis (Eds.), *White teacher/diverse classroom: A guide to building inclusive schools, promoting high expectations and eliminating racism* (pp. 29-42). Sterling, VA: Stylus Publishers.
- Ladson-Billings, G. (2009). *The dreamkeepers: Successful teachers for African-American children* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Langton, V. (2009). Stop the bleeding: Title IX and the disappearance of men's collegiate athletic teams. *Vanderbilt Journal of Entertainment & Technology Law*, 12(1), 183-207.
- Lawrence-Lightfoot, S., & Davis, J. H. (1997). *The art and science of portraiture*. San Francisco, CA: Jossey-Bass.
- Lee, C. D. (2007). *Culture, literacy, and learning: Taking bloom in the midst of the whirlwind*. New York, NY: Teachers College Press.
- Lee, V. E., & Bryk, A. S. (1986) Effects of single-sex secondary schools on student achievement and attitudes. *Journal of Educational Psychology*, 78, 381-395.
- Lewis, C., James, M., Hancock, S., & Hill-Jackson, V. (2008). Framing African American students' success and failure in urban settings. *Urban Education*, 43(2), 127-153.
- Lincoln, y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications
- Lipman, P. (1995). "Bringing out the best in them": The contribution of culturally relevant teachers to educational reform. *Theory into Practice*, 34(3), 202-208.
- Lopez, N. (2003). *Hopeful girls troubled boys: Race and gender disparity in urban*

- education. New York, NY: Routledge.
- Mael, F. (1998). Single-sex and coeducational schooling: Relationships to socioemotional and academic development. *Review of Educational Research*, 68(2), 101.
- Malacova, E. (2007). Effect of single-sex education on progress in GCSE. *Oxford Review of Education*, 33(2), 233-259.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Mickelson, R., & Greene, A. (2006). Connecting pieces of the puzzle: Gender differences in Black middle school students' achievement. *Journal of Negro Education*, 75(1), 34-48.
- Migdal, A., Martin, E., Lewis, M., & Lapidus, L. (2008). The need to address equal educational opportunities for women and girls. *Human Rights: Journal of the Section of Individual Rights & Responsibilities*, 35(3), 9-12.
- Milner, H. R. (2011). Culturally relevant pedagogy in a diverse urban classroom. *Urban Review*, 43, 66-89.
- Morris, E. W. (2007). "Ladies" or "loudies"? Perceptions and experiences of Black girls in classrooms. *Youth & Society*, 38(4), 490-515.
- Morris, E. W. (2005). "Tuck in that shirt!" Race, class, gender and discipline in an urban school. *Sociological Perspectives*, 48(1), 25-48.
- Noguera, P. A., (2008). *The trouble with Black boys...and other reflections on race, equity, and the future of public education*. San Francisco, CA: Jossey-Bass.
- Obiakor, F. (2004). Educating African American urban learners: Brown in context. *Western Journal of Black Studies*, 28(3), 399-406.
- Otto, A. (2004). Single- sex education. *Georgetown Journal of Gender & the Law*, 5(1), 353-360.
- Parker, L., & Rennie, L. (2002). Teachers' implementation of gender-inclusive instructional strategies in single-sex and mixed-sex science classrooms. *International Journal of Science Education*, 24(9), 881-897.
- Parker, L., & Rennie, L. (1997). Teachers perceptions of the implementation of single-sex schools in coeducational schools. *Australian Journal of Education*, 41(2) 119-133.
- Peterson-Lewis, S., & Bratton, L. (2004). Perceptions of "acting Black" among African American teens: Implications of racial dramaturgy for academic and social achievement. *Urban Review*, 36(2), 81-100.
- Robinson, P., & Smithers, A. (1999). Should the sexes be separated for secondary education: Comparisons of single-sex and co-educational schools? *Research Papers in Education*, 14(1), 23.
- Rosenbloom, S., & Way, N. (2004). Experiences of discrimination among African American, Asian American, and Latino adolescents in an urban high school. *Youth & Society*, 35(4), 420-451.
- Rozansky-Lloyd, C. (2005). African Americans in schools: Tiptoeing around racism. *Western Journal of Black Studies*, 29(3), 595-604.
- Salamone, R. C. (2004). Feminist voices in the debate over single-sex schooling: Finding common ground. *Michigan Journal of Gender and Law*, 11, 63-95

- Salomone, R. C. (2006). Single-Sex Programs: Resolving the Research Conundrum. *Teachers College Record*, 108(4), 778-802.
- Sanders, M. G. (1998). The effects of school, family, and community support on the academic achievement of African American adolescents. *Urban Education*, 33(3), 385-409.
- Savin-Baden, M. & Van Niekerk, L. (2007). Narrative inquiry: Theory and practice. *Journal of Geography in Higher Education*, 31(3), 459-472.
- Sax, L. (2005). *Why gender matters: What parents and teachers need to know about the emerging science of sex differences*. New York, NY: Three Rivers Press.
- Shakeshaft, C. (1995). Reforming science education to include girls. *Theory Into Practice*, 34(1), 74.
- Shann,, M. H. (1999). Academics and a culture of caring: The relationship between school achievement and prosocial and antisocial behaviors in four urban middle schools. *School Effectiveness and School Improvement*, 10(4), 390-413.
- Shapka, J. (2009). Trajectories of math achievement and perceived math competence over high school and postsecondary education: Effects of an all-girl curriculum in high school. *Educational Research & Evaluation*, 15(6), 527-541.
- Sherman, J. (1982). Continuing in mathematics: A longitudinal study of the attitudes of high school girls. *Psychology of Women Quarterly*, 7(2), 132.
- Singh, K., & Vaught, C. (1998). Single-sex classes and academic achievement in two inner-city schools. *Journal of Negro Education*, 67(2), 157.
- Sleeter, C. E. (2005). *Un-standardizing the curriculum: Multicultural teaching in the standards-based classroom*. New York, NY: Teachers College Press.
- Smith, D. L. & Smith, B. J. (2009). Urban educators' voices: Understanding culture in the classroom. *Urban Review*, 41, 334-351.
- Spielhofer, T., Benton, T., & Schagen, S. (2004). A study of the effects of school size and single-sex education in English schools. *Research Papers in Education*, 19(2), 133-159.
- Sullivan, A., Joshi, H., & Leonard, D. (2010). Single-sex schooling and academic attainment at school and through the lifecourse. *American Educational Research Journal*, 47(1), 6-36.
- Tannock, S. (2008, September). The problem of education-based discrimination. *British Journal of Sociology of Education*, 29(5), pp. 439-449.
- Taines, C. (2011). "What the real world in schools is like": Urban youth dialogue about educational inequality. *Urban Review*, 43, 414-435
- Tate, W. F. (1995). Returning to the root: A culturally relevant approach to mathematics pedagogy. *Theory into Practice*, 34(3), 166-173
- Teale, W., & Gambrell, L. (2007). Raising urban students' literacy achievement by engaging in authentic, challenging work. *Reading Teacher*, 60(8), 728-739.
- Teel, K. M. & Odidah, J. E. (eds.) (2008). *Building racial and cultural competence in the classroom: Strategies from urban educators*. New York, NY: Teachers College Press.
- Thompson, J. (2003). The effect of single-sex secondary schooling on women's choice of college major. *Sociological Perspectives*, 46(2), 257-278.

- Travis, J. (1993). Making room for women in the culture of science. *Science*, 260(5106), 412-415.
- Tyson, K., & Darity, J. (2005). It's not "a Black thing": Understanding the burden of acting White and other dilemmas of high achievement. *American Sociological Review*, 70(4), 582-605.
- Van de gaer, E., Pustjens, H., Van Damme, J., & De Munter, A. (2004). Effects of single-sex versus co-educational classes and schools on gender differences in progress in language and mathematics achievement. *British Journal of Sociology of Education*, 25(3), 307-322.
- Walker, V. S., (1996). *Their highest potential: An African American school community in the segregated south*. Chapel Hill, NC: The University of North Carolina Press.
- Warrington, M., & Younger, M. (2001). Single-sex classes and equal opportunities for girls and boys: Perspectives through time from a mixed comprehensive school in England. *Oxford Review of Education*, 27(3), 339-356.
- Warrington, M., & Younger, M. (2003). 'We decided to give it a twirl': Single-sex teaching in English comprehensive schools. *Gender & Education*, 15(4), 339-350.
- Watkins, N., & Aber, M. (2009). Exploring the relationships among race, class, gender, and middle school students' perceptions of school racial climate. *Equity & Excellence in Education*, 42(4), 395-411.
- Weiner, G. (1986). Feminist education and equal opportunities: Unity or discord? *British Journal of Sociology of Education*, 7(3), 265-274.
- Williams, V. L. (2004). Reform or retrenchment? Single-sex education and the construction of race and gender. *Wisconsin Law Review*, 15, 15-79.
- Wills, R. (2007). A new and different space in the primary school: Single-gendered classes in coeducational schools. *Educational Studies*, 33(2), 129-143.
- Wills, R., Kilpatrick, S., & Hutton, B. (2006). Single-sex classes in co-educational schools. *British Journal of Sociology of Education*, 27(3), 277-291.
- Wolcott, H (1981). Confessions of a trained observer. In T. S. Popkewitz & B. R. Tachnick (Eds), *The study of schooling*. New York, NY, Praeger
- Younger, M., & Warrington, M. (2002). Single-sex teaching in a co-educational comprehensive school in England: an evaluation based upon students' performance and classroom interactions. *British Educational Research Journal*, 28(3), 353-374.
- Younger, M. R. & Warrington, M. (2006). Would Harry and Hermione have done better in single-sex classes? A review of single-sex teaching in coeducational secondary schools in the United Kingdom. *American Educational Research Journal*, 43(4), 579-620.

Appendix A: Teacher Interview Questions

Participant (Teacher) Interview Questions

1. What is your educational background?
2. What influenced you to become an urban educator?
3. In your words, what is a culturally relevant teacher?
4. How does your definition of a culturally relevant teacher influence relate to teaching specific genders?
5. What are some methods that you use to attend to the culture of your students?
6. What are some examples of strategies that you have used to promote academic excellence amongst your students?
7. Describe how you incorporate gender specific examples in your curriculum.
8. What are the differences between co-educational and single-sex learning environments?
9. How has your experience in a single-sex/co-educational school shaped your beliefs about teaching in urban schools?
10. What are some strategies that you feel are important to consider for single-sex schools to be successful in urban districts?

Appendix B: Student Interview Questions

Participant (Student) Interview Questions

1. Give me an example of an average day at home and at school.
2. Where did you go to school last year?
3. Tell me what you like about your school.
4. Tell me what you wish were different about your school.
5. Describe the perfect teacher.
6. How do your teachers let you know that they want you to succeed?
7. How do your teachers include examples from your life in their instruction?
8. What kind of activities do your teachers use that inspire you to learn?
9. Tell me what you feel is unique about your school.
10. Finish this sentence. My school motivates me
to_____.
11. Tell me about your friends at school.
12. How do your friends in your neighborhood or from your old school treat you
since you go to an all boys/girls school?
13. What do your parents think about you attending an all boys/girls school?
14. How do you feel about attending an all boys/girls school?
15. What do you want to be when you grow up?
16. Do you feel that school is important for your future goals? Do you feel your
classmates feel that school is important for their future goals?

Appendix C: Recruitment Letter

Free To Be You And Me: Gender, Identity, And Education In Urban Schools

Cory T. Brown
Ph.D. Candidate
School of Teaching and Learning
College of Education
513-846-5320 (cell)
brown.2903@buckeyemail.osu.edu

Cory T. Brown, a Ph.D. candidate in the College of Education and Human Ecology at The Ohio State University, is conducting research on single-sex urban schools. The goal of the project is to understand the experiences of the students that attend single-sex schools and to understand the instructional practices of teachers in single-sex schools. Additionally, a co-educational school will provide comparative data regarding student experiences and instructional practices. The information from this study will be helpful to educational policy makers, school administrators, parents and educators as they try to determine the best school choice options for their children and communities as well as future implementation and instructional strategies.

Mr. Brown is looking for students and adults to volunteer to participate in this study. Volunteers must be currently involved with the [REDACTED]. They may be a current school employee (teacher, administrator, counselor and/or school social worker), have a child currently enrolled in a school in one of the three research sites, and/or a current student in 6th grade at one of the three research sites. .

Volunteers will be asked to participate in two-three (2-3), one-hour interviews that Mr. Brown will audio record with a digital cassette recorder to ensure that the interview transcripts accurately reflect the information participants share during their interviews. The interviews will be scheduled during the following time frames: February-May 2011, August-October 2011. Finally, Mr. Brown may also request follow-up interviews with participants as necessary to address the following: clarify information in previous interviews and/or clarify information he notes during observations.

All information is confidential and participation in this study is voluntary. Participants can withdraw from the study at any time without the risk of penalty of any kind.

Appendix D: Recruitment Letter Return Form

Dear Parents:

In an effort to collect data regarding the first-year experiences of your child in this new school environment, I would like to conduct interviews with students that wish to participate in this study starting this month (November, 2011). With your permission, I will conduct these interviews at a time and location that is convenient for you (i.e., in your home, at a library, or elsewhere). In an effort to schedule the interviews at times that best fit your schedule, I am requesting that you provide me your contact information so that we can discuss a day, time, and location to conduct the interview.

Name: _____

Daytime Phone Number: _____

Evening Phone Number: _____

Please return this form in the self-addressed stamped envelope provided.

Thank you in advance for your willingness to allow your child to participate in this study. If you have any questions or concerns, please do not hesitate to contact me at 513-846-5320 or brown.2903@osu.edu. Additionally, when we meet for the first time, I will provide consent and assent forms for you to sign. In an effort to provide as much clarity as possible, I will review each form with you prior to you signing it to answer any questions and concerns that you may have.

Best Regards,

Cory T. Brown

Cory T. Brown, M.Ed.

Ph.D. Candidate

School of Teaching and Learning

College of Education and Human Ecology

Appendix E: Participant Consent Form

Parental Permission For Child's Participation in Research

Study Title: Free to be You and Me: Gender, Identity, and Education in Urban Schools
Researcher: Elaine B. Richardson, Ph.D.; Cory T. Brown, Ph.D. Candidate
Sponsor: NA

This is a parental permission form for research participation. It contains important information about this study and what to expect if you permit your child to participate.

Your child's participation is voluntary.

Please consider the information carefully. Feel free to discuss the study with your friends and family and to ask questions before making your decision whether or not to permit your child to participate. If you permit your child to participate, you will be asked to sign this form and will receive a copy of the form.

Purpose:

The aims of this research are to understand the experiences of students that attend a single-sex school as compared to their peers that attend a traditional co-educational school to determine how these experiences develop their student identity. I will also observe the students during daily instruction and interactions with teachers, administrators and other peers.

Procedures/Tasks:

During the course of the research, the researcher will observe the student during daily interactions and conduct three interviews at various points during the research that will be approximately 30 minutes in length.

Duration:

Your child may leave the study at any time. If you or your child decides to stop participation in the study, there will be no penalty and neither you nor your child will lose any benefits to which you are otherwise entitled. Your decision will not affect your future relationship with The Ohio State University.

Risks and Benefits:

Although no risk or harm is anticipated with this study, if anyone expresses discomfort at any point during the interviews, the co-investigator will discontinue the interview. If a participant expresses fear or continued discomfort with the study, they can withdraw at any time and I will refer them to the school counselor or other appropriate mental health and counseling services.

This research will help determine the educational experiences of your child based on their learning environment.

Confidentiality:

Efforts will be made to keep your child's study-related information confidential. However, there may be circumstances where this information must be released. For example, personal information regarding your child's participation in this study may be disclosed if required by state law. Also, your child's records may be reviewed by the following groups (as applicable to the research):

- Office for Human Research Protections or other federal, state, or international regulatory agencies;
- The Institutional Review Board or Office of Responsible Research Practices;

Incentives:

There are no incentives associated with this research.

Participant Rights:

You or your child may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. If you or your child is a student or employee at Ohio State, your decision will not affect your grades or employment status.

If you and your child choose to participate in the study, you may discontinue participation at any time without penalty or loss of benefits. By signing this form, you do not give up any personal legal rights your child may have as a participant in this study.

An Institutional Review Board responsible for human subjects research reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

Contacts and Questions:

For questions, concerns, or complaints about the study you may Elaine Richardson, Ph.D., 614-292-4382 or Cory Brown, 513-846-5320.

For questions about your child's rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

If your child is injured as a result of participating in this study or for questions about a study-related injury, you may contact ***Elaine Richardson, Ph.D., at 614-292-4382.***

Signing the parental permission form

I have read (or someone has read to me) this form and I am aware that I am being asked to provide permission for my child to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I voluntarily agree to permit my child to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

Printed name of subject

Printed name of person authorized to provide permission for subject

Signature of person authorized to provide permission for subject

Relationship to the subject

Date and time

AM/PM

Investigator/Research Staff

I have explained the research to the participant or his/her representative before requesting the signature(s) above. There are no blanks in this document. A copy of this form has been given to the participant or his/her representative.

Printed name of person obtaining consent

Signature of person obtaining consent

Date and time

AM/PM

Appendix F: Parental Consent

Parental Permission For Child's Participation in Research

Study Title:	Free to be You and Me: Gender, Identity, and Education in Urban Schools
Researcher:	Elaine B. Richardson, Ph.D.; Cory T. Brown, Ph.D. Candidate
Sponsor:	NA

This is a parental permission form for research participation. It contains important information about this study and what to expect if you permit your child to participate.

Your child's participation is voluntary.

Please consider the information carefully. Feel free to discuss the study with your friends and family and to ask questions before making your decision whether or not to permit your child to participate. If you permit your child to participate, you will be asked to sign this form and will receive a copy of the form.

Purpose:

The aims of this research is to understand the experiences of students that attend a single-sex school as compared to their peers that attend a traditional co-educational school to determine how these experiences develop their student identity.

Procedures/Tasks:

During the course of the research, the researcher will observe the student during daily interactions and conduct three interviews at various points during the research that will be approximately 30 minutes in length.

Duration:

Your child may leave the study at any time. If you or your child decides to stop participation in the study, there will be no penalty and neither you nor your child will lose any benefits to which you are otherwise entitled. Your decision will not affect your future relationship with The Ohio State University.

Risks and Benefits:

Although no risk or harm is anticipated with this study, if anyone expresses discomfort at any point during the interviews, the co-investigator will discontinue the interview. If a participant expresses fear or continued discomfort with the study, they can withdraw at any time and I will refer them to the school counselor or other appropriate mental health and counseling services.

This research will help determine if the single sex-schools are purporting to do what they were established to do and utilize student experiences to develop best practices for future implementation.

Confidentiality:

Efforts will be made to keep your child's study-related information confidential. However, there may be circumstances where this information must be released. For example, personal information regarding your child's participation in this study may be disclosed if required by state law. Also, your child's records may be reviewed by the following groups (as applicable to the research):

- Office for Human Research Protections or other federal, state, or international regulatory agencies;
- The Ohio State University Institutional Review Board or Office of Responsible Research Practices;
- The sponsor, if any, or agency (including the Food and Drug Administration for FDA-regulated research) supporting the study.

Incentives:

There are no incentives associated with this research.

Participant Rights:

You or your child may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. If you or your child is a student or employee at Ohio State, your decision will not affect your grades or employment status.

If you and your child choose to participate in the study, you may discontinue participation at any time without penalty or loss of benefits. By signing this form, you do not give up any personal legal rights your child may have as a participant in this study.

An Institutional Review Board responsible for human subjects research at The Ohio State University reviewed this research project and found it to be acceptable, according to

applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

Contacts and Questions:

For questions, concerns, or complaints about the study you may contact Elaine Richardson, Ph.D., 614-292-4382.

For questions about your child's rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

If your child is injured as a result of participating in this study or for questions about a study-related injury, you may contact _____.

Signing the parental permission form

I have read (or someone has read to me) this form and I am aware that I am being asked to provide permission for my child to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I voluntarily agree to permit my child to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

Printed name of subject

Printed name of person authorized to provide permission for subject

Signature of person authorized to provide permission for subject

Relationship to the subject

Date and time

AM/PM

Investigator/Research Staff

I have explained the research to the participant or his/her representative before requesting the signature(s) above. There are no blanks in this document. A copy of this form has been given to the participant or his/her representative.

Printed name of person obtaining consent

Signature of person obtaining consent

Date and time

AM/PM

Appendix G: Student Assent

Assent to Participate in Research

Study Title: Free to be You and Me: Gender, Identity, and Education in Urban Schools
Researcher: Elaine B. Richardson, Ph.D.; Cory T. Brown, Ph.D. Candidate
Sponsor: NA

- You are being asked to be in a research study. Studies are done to find better ways to treat people or to understand things better.
- This form will tell you about the study to help you decide whether or not you want to participate.
- You should ask any questions you have before making up your mind. You can think about it and discuss it with your family or friends before you decide.
- It is okay to say “No” if you don’t want to be in the study. If you say “Yes” you can change your mind and quit being in the study at any time without getting in trouble.
- If you decide you want to be in the study, an adult (usually a parent) will also need to give permission for you to be in the study.

1. What is this study about?

This study is about your experience as a student and how your interactions with teachers, your principal, building personnel, and your peers contribute to your student identity.

2. What will I need to do if I am in this study?

You will not need to do anything to be in this study.

3. How long will I be in the study?

You will be in this study for approximately 13 months.

4. Can I stop being in the study?

You may stop being in the study at any time.

5. What bad things might happen to me if I am in the study?

Nothing bad will happen to you as a result of participating in this study. All information you give and anything you say will be kept in confidence and will not be shared with anyone. I will not be using your real name in this study.

6. What good things might happen to me if I am in the study?

Your voice will help develop new and innovative teaching strategies to improve the education of students that are coming behind you.

7. Will I be given anything for being in this study?

You will not be given anything for being in this study.

8. Who can I talk to about the study?

For questions about the study you may contact *Dr. Elaine Richardson at 614-292-4382.*

To discuss other study-related questions with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

Signing the assent form

I have read (or someone has read to me) this form. I have had a chance to ask questions before making up my mind. I want to be in this research study.

Signature or printed name of subject

Date and time

AM/PM

Investigator/Research Staff

I have explained the research to the participant before requesting the signature above. There are no blanks in this document. A copy of this form has been given to the participant or his/her representative.

Printed name of person obtaining assent

Signature of person obtaining assent

Date and time

AM/PM

This form must be accompanied by an IRB approved parental permission form signed by a parent/guardian.