

Gendered Classrooms:
Exploring the Legal & Social Acceptance of Single-Sex Education through a Gender,
Race, and Class Analysis

By

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Abstract

In the past decade the number of US public schools operating single-sex classrooms has increased from just a handful to over five hundred in 2009. This thesis uses a gender, race, and class analysis to explore the recent increase in single-sex schools and classrooms in US public education. Supporters of single-sex education believe that there are innate differences between boys and girls brain abilities and personalities, pointing to gender gaps in educational performance and gendered behavior patterns as evidence of these innate differences. To challenge assumptions of innate gender differences this thesis presents theories of social construction suggesting that gendered differences in academic performance and behavior are due in large part to environmental factors including societal stereotypes and expectations. Additionally, the author explores the complexity of academic performance gaps pointing to larger race and class gaps than gender gaps as well as evidence showing steady declines in gender performance gaps. Drawing on social, feminist, and legal theories the author asks why it is legal, government sanctioned, and socially acceptable to segregate students by gender, but not by race or socioeconomic class background. While gender, race, and class are all (considered by social scientists to be) socially constructed sites of oppression, gender is the only classification in which biological arguments of innate difference are both socially and scientifically acceptable. At its core single-sex education is a gender issue; however the author argues that widespread shifts toward single-sex public education will have profound consequences for the meanings of gender, race, and class constructions.

Ultimately single-sex education suggests that gender differences are the most significant differences among US schoolchildren. Single-sex education relies on the assumption that difference is counterproductive to learning and fails to prepare students for the diversity of persons and experiences that they will encounter in their workplaces, communities, and personal lives.

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Introduction

Clearly the reasons behind the recent establishment of single-sex schools are no longer simple; they represent efforts to address not only gender bias but also racial and cultural issues. (Datnow, Hubbard, & Woody, 2005, p. 114)

In recent years, single-sex public education has become increasingly popular in the United States. According to a recent NBC News report there are currently 518 public schools in the US that operate single-sex classrooms (Bell, 2009). The motivation for single-sex education is based on the argument that separating students by sex results in higher academic achievements for both boys and girls and maintains that separating students by sex also renders valued social benefits (i.e., better behavior for boys and increased leadership skills for girls). This educational movement assumes that boys and girls have distinctly different learning styles and experiences within the classroom. Proponents, such as Leonard Sax, cite select scientific studies reporting sexual differences in brain development and differences in hearing abilities (National Association for Single Sex Public Education, 2009); Sax believes that these differences can be better addressed in single-sex classrooms. Additionally, supporters of single-sex education believe that separating students based on sex will lead to less gender stereotyping in the classroom because without the opposite sex in the classroom, students will not be expected to follow specific gender norms. To contrast, opponents of single-

sex education fear that separating students by sex will actually increase gender stereotyping because separating students by sex is itself a form of gender stereotyping. They also fear that the ideal of separate but equal is impossible in sex-segregated classes, and they note that the research supporting single-sex education is extremely limited (Carr, 2007b), not representative of the diversity of students in US schools, and arguably biased by our society's prevalent gender stereotypes. As a relatively new movement in US educational policy and practice, it is too early to have definitive evidence on either side of the single-sex/coeducation debate. However, as a society that has prided itself on equality within coeducation, US policy makers and educators must be cautious before jumping on the single-sex public education bandwagon.

Many potential problems could arise from single-sex education, such as the one a popular television character, Lisa Simpson, encountered on the Fox Network TV show *The Simpsons*. This television show is known for satirizing a plethora of social issues, including everything from gay marriage to religious cults; thus it was only a matter of time before the cartoon parodied the recent educational trend of single-sex public schools. In the 17th season episode "Girls Just want to have Sums" (originally aired on April 30, 2006) Springfield Elementary changes from coeducational to single-sex, separating boys and girls to better reflect their presumably distinctive learning styles and interests. Lisa Simpson (known for her "enormous intelligence") is initially pleased at her new girl-centric school with pink walls and Frida Kahlo paintings, but her opinion of the situation drastically changes after attending her new math class. In the girls' math class students are taught the magic of math rather than being expected to perform any math problems because problems are for boys. Frustrated by the watered-down version

of her favorite subject, Lisa decides to disguise herself as a boy so that she can attend the more rigorous and competitive math class at the boys' school. With the help of her brother Bart, Lisa becomes the most popular kid in school by not only dressing like a boy but also acting like one. Ultimately Lisa earns the highest test scores and takes the award ceremony as an opportunity to reveal her true female self. Lisa's example proves the school administrators wrong and the school returns to coeducation.

This particular example plays off of a common gender stereotype, namely, that boys are inherently better at math than are girls. In turn the episode brings to light a potential problem that could come from single-sex education: when separating students by sex (gender) we run the risk of forcing students into stereotypical gender roles which in turn could limit student success. Lisa Simpson does not fit into this common gender stereotype, so the girls' math class—that was changed to more appropriately target girls' particular learning style—limited her success at math, whereas she did much better in the boys' class, which engaged the problem-solving and competitive nature of its students. While an exaggerated parody, the *Simpsons* episode aptly demonstrates the fear that single-sex education could increase gender stereotyping in schools, as well as the destructive nature of these stereotypes.

The issue of single-sex education becomes increasingly complicated when considered in the contexts of race and socioeconomic class. The Excellence Boys Charter School of Bedford Stuyvesant provides a real-life example of a single-sex school where some of these complexities become apparent. The Excellence Boys Charter School of Bedford Stuyvesant is a New York City public school; the school opened in 2004 and it serves 300 boys in grades Kindergarten through Eighth. According to the

school's website (2009) the student population is 98 percent African American and 58 percent of the students receive free or reduced price lunches. Any New York City boy is eligible to be enrolled in the school, but special preference is given to students who live within the limits of the school district and additional preference is given to students who demonstrate financial need, either through the receipt of food stamps, receipt of TANF benefits, or by living in a New York City Housing Authority Development. Although the success rates for African American and poor students are relatively low on a national scale, the boys at the Excellence School are performing remarkably well. In the 2007-08 academic year the third and fourth graders at the Excellence School took the New York State standardized tests in English/language arts and math. In both areas 90-100 percent of the Excellence School boys scored proficient or advanced on the exams; these scores set the Excellence Boys Charter School of Bedford Stuyvesant apart as one of the top public schools in New York State.

Although the Excellence School is only in its fifth year of operation, it clearly stands apart as an outstanding educational institution serving poor African-American boys who are often at risk of school failure and other social setbacks. The Excellence School is frequently cited as an example of a successful single-sex school (Weil, 2008), but is the school's single-sex nature the main reason for the school's success? If the answer to this question is yes, then it follows that the best way to increase the success rates of poor African-American students is to enroll them in single-sex schools. But is the all-boys classroom the only reason for the Excellence School's success? As a charter school with state of the art facilities and resources, it would also be reasonable to assume that a large measure of the school's success could be due to its increased resources as

compared to many poor inner-city schools. While single-sex education proponents like to take credit for the Excellence School's success, then, it is not at all clear whether this success is actually due to a single-sex focus, a race-specific focus, the increased resources available at the school, or other factors entirely. Because research on single-sex schools has been fairly limited, the same questions must be asked of single-sex schools that serve students from every race and class background.

Why a Gender, Race, and Class Approach?

From the example of the Excellence Boys Charter School of Bedford Stuyvesant in New York City it is clear that single-sex schools are not always comprehensible through the lenses of sex and gender alone; critical race and class analyses are also useful when examining single-sex schools. One reason an approach that takes into account gender, race, and class is useful is that gender (sex) is not the only significant classificatory marker of American school children. No individual is bound to a gender identity alone; rather all people also experience racial and class (as well as a variety of others) identity markers. Because analyses of gender in education have often focused solely on the experiences of white and middle-class students (Rigdon, 2008), studying single-sex education through the perspective of gender alone bears the risk of discrediting and marginalizing the experiences of students who are members of racial minorities and less privileged socioeconomic classes. In addition, a gender, race, and class approach is important because gender differences are not the only cause of performance disparities in the US public education system. Race and class are both equally, if not more, significant in determining a student's likelihood of success in school. Finally, it is important to examine single-sex schools through a gender, race, and class approach because of the

increasing number of single-sex schools serving poor minority communities; although it is illegal to separate students based on race or class differences, the use of single-sex education in poor minority communities could be viewed as a backhanded effort to avoid these restrictions and address educational and cultural issues facing poor and racial minority students. Gender, race, and class are all studied in sociology as sites of social stratification, and while they share some similarities in generating oppression, they are not synonymous classifications in discussions of single-sex education. Specifically, the historical, legal, and cultural differences of these classifications result in varying meanings and possibilities in the US public education system. Additionally, US education is plagued by performance gaps based on gender, race, and socioeconomic class differences and it is important to take all of these factors into consideration when examining single-sex public education.

The following thesis addresses single-sex education and its relationships to gender, race, and class. Chapter 1 introduces the recent movement for single-sex education in public schools exploring arguments for and against the movement as well as discussing brief historical contexts of US public education. Chapter 2 introduces theories of gender, race, class, and intersectionality to better understand the significance of these classifications in relation to single-sex education. The discussion compares theories of biological differences (these theories are central in the promotion of single-sex education) with theories of social construction, ultimately arguing that belief in innate biological differences between the sexes/genders is crucial to the acceptance of single-sex public education. Chapter 3 addresses one of the main justifications for single-sex education, gender performance gaps. There are substantial gaps in educational achievement based

on gender, race, and socioeconomic class differences, and arguably race and class gaps are more severe than gender gaps. Despite the existence of race and class gaps, supporters of single-sex education focus on gender gaps alone claiming that these gaps are evidence of biological brain differences between the sexes. Chapter 4 focuses on the legal standing of single-sex education comparing it with race and class segregation—both of which are currently illegal. The use of biological differences is again cited as a potential contributor to the legal acceptance of single-sex public education. Chapter 5 asks what the consequences of single sex schools are for gender, race, and class in the US (both consequences for interactions of these groups as well as consequences for the meanings of such classifications). Multicultural education is introduced as an alternative to separating students based on sex/gender.

This thesis focuses solely on single-sex education within the United States; it is premised on the assumption that gender, race, and socioeconomic class classifications are based on social constructions, and that it is important to understand the meanings of single-sex education within the particular social context of the US. US public schools are facing a plethora of problems—performance gaps, funding disparities, increasing discipline problems, rising rates of teenage pregnancy, and lower achievement levels compared to students in other developed countries—and the students who attend these schools are increasingly diverse. Arguably public school problems are much deeper than gender gaps and students are much more complex than binary gender classifications. While students may experience individual benefits from participating in single-sex education, the overgeneralizations (dualistic dichotomy between boys and girls) assumed

by this educational movement could have severe consequences for gendered interactions as well as severe consequences for the meanings of gender, race, and class in our society.

Chapter 1: The Basics of Single-Sex Education

As for reading material, boys want monsters; girls, movie stars.

Kevin Tibbles, NBC News

There's nothing that shows us that if you do nothing but separate the sexes you get success. There's a lot more similarities among boys and girls than there are differences, and I think that if we look at what those similarities are knowing that some boys excel differently with auditory some girls excel differently with auditory, and really acknowledging that there should be a diverse curriculum both for boys and girls, really should be the way to go. We know that works.

*Latifa Lyles, National
Organization for Women*

We're not suggesting that every child should be in a single-sex school, we do believe that every parent should have a choice.

*Dr. Leonard Sax, National Association
for Single Sex Public Education*

The above quotations are drawn from a recent NBC Today Show segment on single-sex education (Bell, March 3, 2009). The report introduced viewers to the Carmen Trails School in suburban St. Louis where second grade students are placed in separate classes based on sex. In the opening seconds viewers see boys reciting facts while practicing calisthenics and girls reading while listening to classical music. The piece continues to point out differences between boys and girls noting that the girls sit down at traditional desks to do their schoolwork, whereas the boys either stand, sit at stools, or sit in the classroom tent. Candid statements from parents, teachers and students litter the

piece; at one point a boy says that he thinks girls are weird and a girl says she thinks boys are weird. After the brief look into the Carmen Trails School, the cameras return to the studio where Today Show anchor Matt Lauer moderates a brief debate between Leonard Sax, founder of the National Association for Single Sex Public Education, and Latifa Lyles, Vice President for the National Organization for Women. Sax makes statements in defense of single-sex public education, arguing that it is not the best way for all students, but that every parent should have the choice to send their child to such a school. While parents currently do have the choice to send their children to single-sex private schools, Sax says, this choice is contingent on the parent's ability to pay private school tuition, and thus available to only a limited group of parents and children. Lyles counters that boys and girls express more similarities than differences, arguing that single-sex schools are not a magic bullet for improving school performance. Increases in resources, she says, are a more reliable means of ensuring student success.

While only a few minutes long, this news segment highlights the major themes of the single-sex education debate. A school develops a successful single-sex program, but it seems to be based on gender stereotypes. The boys are shown as active and adventurous—doing calisthenics and completing their homework in the classroom tent, while the girls are shown as more cooperative and calm—sitting in their desks and reading to classical music. While not stated outright, the piece suggests that the girls are thriving in a traditional classroom, while the boys are shown excelling in a non-traditional classroom, in turn implying that our standard classrooms are not meeting the educational needs of boys. The supporter of single-sex education (Sax) makes the politically correct statement that separating the sexes is not best for all students, but fails

to introduce any student for which this would actually be true. To contrast, the opponent of single-sex education (Lyles) denounces the success of the Carmen Trails School, and those like it, as being the result of increased resources, not the single-sex environment. Neither party is given more than a few seconds to make his or her case and ultimately the debate remains unresolved. The debate over single-sex public education is the primary topic of this chapter. However, before delving further into this debate, it is important to first put the debate in context.

U.S. public education is in a crisis; compared to children in other wealthy countries, America's children are performing less competitively, and the achievement gap between rich and poor students in the US is extreme (Weil, 2008). More specific crises cited are the fact that boys are falling behind academically (Thiers, 2006), rates of teenage pregnancy are increasing (Weil, 2008), and discipline problems are increasing in schools, especially among minority boys in inner-city schools (Balkin, 2002). One solution for all of these diverse problems that is gaining in popularity is the movement toward single-sex classrooms and schools. According to the aforementioned Today Show report, 518 schools operate single-sex programs (either as entirely single-sex schools, or coed schools with single-sex classes within them) (Bell, 2009). Separating students by sex in educational settings is by no means a new concept, quite the contrary in fact. Single-sex education—or frequently education only for boys—was the norm in the US until the mid to late 19th century (Levit & Verchick, 2006). In Colonial America girls were frequently denied the opportunity to attend school based on the assumption that they did not need to be educated to serve as wives and mothers. Some white girls were allowed to attend “dame schools” where they learned minimal reading skills, but

black and Native American girls very rarely received any education. As the country progressed, coeducation gradually gained in popularity, appearing first in rural schools where there were so few students that it made little sense to separate students based on sex (or age). By the mid 19th century most public elementary schools were coed, but single-sex classes persisted in public high schools. Interestingly, in the South where schools were racially segregated, white schools were generally single-sex while African Americans' schools were generally coeducational. By the end of the 19th century teaching, at the elementary and secondary level became increasingly a women's profession. As women gained respect as educators, they also gained respect as students and were thus permitted to attend classes with their male counterparts. Coeducation became the norm in US public education at the close of the 19th century.

Throughout the 20th century a number of laws and court cases validated women's rights to educational equity and simultaneously instilled coeducation as the legal standard for US public education. Despite these efforts at educational equity, by the early 1990s it was becoming clear that although boys and girls were sitting in the same classrooms, they were not receiving the same educational opportunities. In a 1992 publication the American Association of University Women outlined the ways in which US schools were shortchanging girls, specifically pointing to girls' lower performance in the sciences, arguing that boys receive more attention from teachers (from elementary school through college), and noting that boys are more likely than girls to see themselves reflected in the materials studied in school (AAUW, 1992). Similarly, Myra and David Sadker published *Failing at Fairness: How our Schools Cheat Girls* (1994) noting that girls' learning problems are less frequently identified and also examining the fact that girls start

elementary school outperforming boys, but by graduation score 50 points lower on the SAT. Both of these publications bring to light a body of research dating back to the 1980s that highlights the gender bias against girls in education (Datnow, Hubbard, & Woody, 2005). More recently, rhetoric of a boy crisis in education has gained in popularity in US media and education circles suggesting that there are also educational biases against boys. Discussions of the “boy crisis” focus on the lowering achievement levels of boys (Spielhagen, 2008); one account of the boy crisis notes that boys are less likely to complete their homework, more likely to drop out of high school, and enrolling in college at lower rates (Sommers, 2000). As parents, educators, and policy makers began to recognize both the shortfalls in educational equity for girls and the growing boy crisis, single-sex public education became a popular alternative to the standard of coeducation. Although growing in popularity, single-sex education remains a highly controversial issue. The remainder of this chapter examines the arguments both for and against single-sex public education, paying special attention to Leonard Sax and his contributions to the advancement of single-sex education.

Support for Single-Sex Schools

Much of the support for single-sex public education is based on the belief that there are innate (biological/natural) differences between the two sexes (Weil, 2008). Authors such as Leonard Sax (2005) cite a piecemeal of scientific studies that espouse deep rooted differences between boys and girls; while these authors do not entirely disregard the impact of society, they do argue that differences between the sexes are primarily biological—appearing as early as infancy—that these differences can be scientifically proven, and that these differences are significant enough to warrant

different and separate learning environments for children and young adults. Caplice (1994) summarizes the three primary arguments that are used to defend single-sex schools: 1.) single-sex environments provide relief from the distraction of sexual pressures, 2.) single-sex classrooms allow teachers to work within the distinct dispositions of each gender, and 3.) single-sex learning environments better recognize and work with the distinct developmental characteristics of each sex. Each of these three arguments is briefly discussed below.

The fear of sexual distraction has been used as a reason to separate the sexes for centuries. Balkin (2002) asserts that “women were often seen as a cause of men’s lack of success, so that it was necessary to separate them in order to ensure the men thrived” (p. 126). Religious schools have also used the sexual distraction logic to separate students by sex; in these cases sexual purity was seen as a sign of moral righteousness. Modern concerns over sexual distraction now come from the sides of both sexes with a large emphasis placed on the effort to lower teenage pregnancy rates, the assumption being that if teenage girls are not in school with teenage boys they are less likely to be impregnated by these boys. Concerns over sexual distraction are relevant when the discussion is focused on middle and high school students (who are presumably heterosexual), but they seem less applicable when looking at elementary age students. Supporters of single-sex education argue that even in the absence of sexual distractions young children are frequently distracted by classmates of the opposite sex. These distractions stem from the differing social habits of boys and girls; girls find boys to be too noisy and boys prefer to be around other boys who appreciate their humor (Weil, 2008). Supporters of single-sex

education argue that without these opposite sex social—or sexual—distractions students are able to focus better in school (Thiers, 2006).

Many of the arguments for single-sex education point to distinct differences in the dispositions of boys and girls. Boys are thought to be aggressive and competitive while girls are more nurturing and emotionally expressive (Caplice, 1994). Additionally boys act out in class more, which is detrimental to girls who presumably do not require discipline, and it is assumed that boys do not act out in single-sex environments because they do not have a female audience to impress. Along with these very stereotypical distinctions Sax (2005) goes so far as to suggest that boys and girls should have different colored walls, different types of lights, and different temperatures in the classroom. In discussions of dispositional differences between girls and boys it is important to recognize that the differences are only generalizations based on statistics; very often the average differences between the sexes is less than one standard deviation apart and there is in fact more overlap than true difference. To illustrate, gender differences in height are generally two standard deviations apart, meaning that while on average boys are taller than girls, but there are countless exceptions to this rule—girls who are taller than boys (Weil, 2008). While statistically boys may be more competitive and act out more in class, many girls are also competitive and many girls also act out in class. Take for example female competitive athletes and female competitive quiz bowl participants, if all boys were competitive and all girls were cooperative then these competitive girls wouldn't exist. But they do, and likewise if girls didn't act out in class then there would be no need for juvenile detention programs for girls (or prisons for women). Sax and other supporters of single-sex education argue that these dispositional differences are

biologically based, while social scientists counter that differences are caused by social construction. Regardless, the realities of dispositional differences suggest there are in fact more overlaps than differences.

Common developmental and educational differences between boys and girls include ideas that boys are better at logical, quantitative, and spatial skills while girls are better at reading, writing, and language skills. Additionally it is argued that girls develop fine muscle coordination skills before boys while boys develop large motor coordination before girls (Caplice, 1994). Based on these developmental differences, some proponents of single-sex education argue that girls and boys should start school at different ages—girls at age five and boys not until age six (Weil, 2008). Like the dispositional differences discussed above all of these developmental and educational differences are based on statistical averages and there is significant overlap in the developmental and academic achievements of boys and girls. Myra and David Sadker (1994) studied gender in education and found that on average high school girls receive higher grades, but that high school boys receive significantly higher scores on standardized tests such as the PSAT and the SAT. The SAT tests students in reading, writing, and mathematics, and in all three of these areas boys—on average—receive higher scores than girls. Thus, while girls are said to be leading the curve in reading, writing, and language skills, boys in fact outperform girls on the reading and writing portions of the SAT. This contradiction suggests that developmental and educational differences are much more complicated than simply saying girls excel at reading and boys excel at math. Sax argues that these differences are “hardwired” and linked directly to sex, but the complications of contradictory test scores and grades, along with the significant overlaps in measures of

development and achievement, suggest that social factors are also relevant to discussions of differences.

A final argument used in support of single-sex education is that parents and students should have a diversity of academic options and single-sex classes are just one example of the many options that can be provided (Carr, 2007a). Interestingly, diverse educational options is one of the reasons the US Department of Education lifted the restrictions on single-sex education. Opponents of single-sex education, however, argue that these schools are opposite of diversity because they segregate students. I discuss the relationship between single-sex education and multiculturalism and diversity further in Chapter 5.

Leonard Sax and the National Association for Single Sex Public Education

Dr. Leonard Sax is at the forefront of the movement for single-sex education in public schools. Sax is a family physician and Ph.D. psychologist; his contributions to the single-sex education movement include the popular publication of the books *Why Gender Matters: What Parents and Teachers Need to Know About the Emerging Science of Sex Differences* (2005), and *Boys Adrift: The Five Factors Driving the Growing Epidemic of Unmotivated Boys and Underachieving Young Men* (2007). He also founded the National Association for Single Sex Public Education (NASSPE). In *Why Gender Matters* Sax (2005) introduces scientific evidence supporting the claim that the differences between boys and girls are naturally occurring, vast, and profound. While it is frequently asserted that gender differences are socially constructed—which is discussed further in the next chapter of this thesis—Sax argues that these differences are “hardwired”. Pointing to differences in male and female retina formation, hearing

abilities, and brain tissue, Sax focuses specifically on potential sources of biological sex differences between boys and girls. Extrapolating from this, Sax addresses a wide variety of social issues including drug use, sexual activity, aggression, and risk taking, again to discuss behavioral differences between boys and girls. Whether the research he relies on connects the biological with the social or merely assumes that one stems from the other, Sax draws clear conclusions about the social importance of biological differences and the causal direction from claims such as brain mass development to social gendered distinctions in calmness or aggression. The book targets both teachers and parents; Sax believes that if teachers and parents recognize and understand the innate differences between boys and girls that they will be better suited to empower every boy and girl to reach their full potential.

Sax's book *Boys Adrift* (2007) makes the argument that attention must be paid to the silent and unrecognized disparity creeping into our schools, namely, the boy crisis. In this volume Sax identifies five factors that he believes are leading to the declines in boys' achievement and motivation levels in school. These factors are 1.) video games that disengage boys from academics, 2.) standard teaching methods that do not center on boys' interests, 3.) overmedication for ADD and ADHD, which is permanently damaging boys' brains, 4.) increases in environmental estrogens, which are causing disruptions in boys endocrine systems, and 5.) masculinity's becoming devalued in US culture (Sax cites cartoon character Homer Simpson as an example). For each of these factors Sax provides examples and suggestions of ways that parents can combat the issues. While *Boys Adrift* is less focused on single-sex education, the book complements Sax's belief

that boys and girls are vastly different and have different needs; the book stands as a pillar for the belief that American boys are experiencing a crisis in their educations.

More directly addressing the topic of single-sex education, The National Association for Single Sex Public Education (NASSPE) is a non-profit organization “dedicated to the advancement of single-sex public education for both girls and boys” (NASSPE website, 2009). Founded in 2002 by Sax, the NASSPE acknowledges that single-sex schools are not appropriate for all children, but asserts that all parents *should* have the choice to send their children to single-sex schools. The organization boasts three main missions: 1.) to provide teachers with professional development opportunities, 2.) to serve as a resource to school administrators, teachers, and parents interested in single-sex education, and 3.) to serve as a clearinghouse for research and facts on public education in the US as well as to disseminate new research. In the research section of the website, the NASSPE presents research and statistics that can be used to support single-sex education. The section opens by citing a recent National Institutes of Health (NIH) study (Lenroot et al, 2007) claiming in large, bold print that “there is **no overlap in the trajectories of brain development** in girls and boys” (NASSPE website, 2009). Under the heading of “Learning Style Differences” the NASSPE claims that there are differences in the amount of time that boys and girls can sit still, pay attention, and remain quiet. The website boasts that single-sex education motivates boys to learn and expands educational opportunities for girls, encouraging them to excel in non-traditional fields such as math and science.

The volume of research presented on this website and the sources of funding for many of the studies (e.g., NIH) are impressive. General readers are likely to come away

from the site concluding that the scientific community is in agreement over the need for and biological bases that could support single-sex education. Yet upon careful review of much of the research cited, including the NIH study noted above, these conclusions are not warranted. The NIH study, for example, does demonstrate subtle differences between the brain development trajectories of males and females, but nowhere does the study state that there is “no overlap” in the trajectory of male and female brain development. While the website claims differences in boys’ and girls’ abilities to sit still, pay attention, and remain quiet, the website provides no explanation or data to back up these claims. Those claims that are backed up are generally only validated through anecdotal evidence or a single study. Far from being a “clearinghouse” for research related to the topic, the site instead simply represents Sax’s overall agenda, legitimating it with carefully selected (and carefully omitted) studies. These brief critiques of the information presented on the NASSPE website represent only a small portion of the arguments against single-sex education. As single-sex education gains in popularity, there is also a growing backlash to this form of education.

What’s the Big Controversy? Arguments in Opposition to Single-Sex Education

The issue of public single-sex education remains quite controversial in the US. Carr (2007b) identifies three major arguments made against single-sex public education: 1.) concern over historical sexism against women in educational systems and fear that single-sex education will lead to increased gender stereotyping; 2.) skepticism about whether separate schools can provide equal opportunities; and 3.) suspicion that the research supporting single-sex education is limited and possibly politically biased.

For centuries, sexism and gender stereotyping were the norm in education—it was not until the late 19th century that women as a group were even given the opportunity to attend schools and study the same subjects as men. Thus it is understandable that there is concern that single-sex education could lead to increased sexism and gender stereotyping in schools. Levit and Verchick (2006) argue that boys in sex-segregated classes often develop attitudes that favor traditional and stereotypical views of gender roles. Similarly, Rigdon (2008) notes that boys' schools contain the severest forms of sexism—offensive explicit sexual and demeaning references to women that are unacceptable in coeducational classrooms are often commonplace in boys-only classes—and that these schools could reinforce male exclusivity and dominance. Critics argue that single-sex schools could reiterate stereotypes because they do not provide boys and girls the opportunity to learn more about each other experientially, and that these schools also fail to prepare students for mixed-gender social interactions later in life (Sherwin, 2005). Both girls and boys are harmed by increases in gender stereotyping, single-sex opponents say (Theirs, 2006). Stereotypes limit the accepted expressions of both sexes, and failing to provide students with adequate social interactions with the opposite sex could increase communication (as well as other) problems in their adult personal and professional lives.

When cartoon character Lisa Simpson attends an all-girls' math class she finds the class significantly less rigorous than the boys' math class. While satirized and arguably blown out of proportion, this example expresses the fear that separate schools will not have equal opportunities or resources. Opponents of single-sex education claim that segregating the sexes is no different from segregating the races (Sherwin, 2005), arguing that since the Supreme Court ruled that separate can not be equal in *Brown v. Board of*

Education (1954), the same theory should apply to sex. This discussion of separate but equal is continued in Chapter 3.

Critics of single-sex education are particularly concerned about the validity of the research supporting single-sex education. There are two types of research that support the implementation of single-sex schools: research pointing to innate differences between the sexes and research showing educational advantages for single-sex schools. Supporters of single-sex education rely on a core group of scientific studies espousing hardwired differences between the sexes. Critics argue that these studies are hand-selected for their support of innate differences, when in fact an entire other body of research could be cited arguing more similarities between the sexes. Those studies that are used to support innate differences between the sexes are sometimes misrepresented, such as the previously mentioned NIH study, cited by the NASSPE, which never actually states that there is no overlap in the trajectories of brain development (Lenroot et al, 2007). Considering that single-sex public schools are still relatively new and rare, most research comparing single-sex schools with coeducational schools actually compares girls' private and parochial schools to public coed schools (Carr, 2007b). Research that does compare single-sex public schools with other public schools is frequently drawn from schools outside the US. Critics of single-sex education are also concerned by the lack of data examining the effects of single-sex education on racial minorities, different socio-economic backgrounds, religions, and non-heterosexual students (Rigdon, 2008).

Some of the most vocal criticism against single-sex education comes from feminist and civil rights organizations that are overwhelmingly opposed to the single-sex education movement. Many prominent feminist organizations have issued official

statements against single-sex education efforts. For example the National Organization for Women (NOW)—the largest US feminist membership organization—criticizes the movement for its emphasis on improving the education for boys, not girls. NOW argues that separate is never equal; the organization fears that single-sex education will greatly increase sex stereotyping in adulthood. NOW is especially concerned that increasing stereotypes will limit the future success of women’s employment possibilities. Rather than using single-sex education as a method for fixing failing public school systems, NOW argues that resources should be used in other ways such as to increase funding for schools, to reduce class sizes, and to improve the resources and training for teachers (NOW website, 2006). The American Association of University Women (AAUW) is another prominent U.S. feminist organization that is publicly speaking out against single-sex education. Like NOW, AAUW also fears that single-sex classrooms will reinforce gender stereotypes and increase discrimination. AAUW argues that single-sex education restricts the educational opportunities for both boys and girls, and it stresses that in most cases girls’ programs receive fewer resources than boys’ (AAUW website, 2006). Both NOW and AAUW cite the great educational advancements that women have made in recent decades and ultimately fear that these gains will be lost if resources are directed primarily at the boy crisis. The American Civil Liberties Union (ACLU) is also very critical of single-sex education. The ACLU points to the limited and incomplete evidence used in support of single-sex education and argues that much more research is needed before such schools are put into practice. The ACLU also believes that single-sex public education will weaken the equal rights protections for schoolchildren.

Although the courts have not yet considered the new regulations on single-sex education, the ACLU believes these regulations to be unconstitutional (ACLU website, 2004).

Do Single-Sex Schools Work?

From these discussions it is clear that there is both passionate support for and opposition to single-sex public education. Supporters believe that single-sex education is the key to increasing the success of both boys and girls arguing that we have to recognize the innate differences between the sexes in order to better meet their needs. To contrast, the opposition fears that single-sex schools will increase gender stereotypes, that such schools will worsen relationships across the sexes, and that students will receive unequal resources and opportunities in sex-segregated classes and schools. Regardless of the heated debate over single-sex education, the question remains as to whether or not single-sex schools produce the desired academic and social results. Do single-sex schools lead to higher academic performances for both girls and boys? In response to this question Professor of Education Frances R. Spielhagen (2008) says, yes, no, and maybe; through the trial cases at a number of schools it is clear that single-sex schools work well for some boys and girls in some situations, but due to the complexity of student populations there is no one-size-fits-all answer for improving student success. The Excellence Boys Charter School (mentioned in the introduction) is a highly publicized example of an academically successful single-sex school. A similarly successful and well publicized school is the Young Women's Leadership Academy of East Harlem. Opened in 1996 to enhance the educational opportunities of inner-city minority girls, TYWLS instills moral decision making skills and expects academic success and college enrollment for all of the girls who attend (TYWLS website, 2009). Often receiving less media attention, a

number of public schools have made unsuccessful attempts at single-sex programs. In 1997 California was the first state to operate a large-scale experiment in single-sex public education; the state rewarded six districts with five hundred thousand dollars in grant money to establish single-sex schools. The school districts were primarily interested in receiving the extra grant money and lacked a deep philosophy in single-sex education; similarly many students and parents were interested in the experimental schools because of the additional resources that would be made available by the grant money. Despite the increase in resources, the California single-sex schools failed to improve student academic performance and also failed to improve classroom discipline problems (Datnow, Hubbard, & Woody, 2005).

But even if some single-sex public schools are leading to increases in test scores for both girls and boys, is there a social cost to this success? Could the cost of increased gender stereotypes and less interaction—cooperation—between boys and girls outweigh the academic benefits that single-sex schools might provide? Support for single-sex schools relies heavily on the assumption that boys and girls are inherently different due to brain differences and other physiological distinctions between the sexes. But what if this is not the case? What if any dispositional, behavioral, and learning differences between boys and girls are instead actually socially constructed differences—not “hardwired” at all but instead the result of social phenomena?

Chapter 2: Social Construction versus Biological Differences: Theories of Gender, Race, and Class and the Role of Biology in Promoting Single-Sex Education

For the past three decades, the influence of social and cognitive factors on gender traits has been systematically overestimated while innate factors have been neglected. Leonard Sax (2005, p. 263)

Gender is the apparatus by which the production and normalization of masculine and feminine take place along with the interstitial forms of hormonal, chromosomal, psychic, and performative that gender assumes. Judith Butler (2004, p. 42)

Race, as a meaningful criterion within the biological sciences, has long been recognized to be a fiction. Henry Louis Gates, Jr. (1986, p. 4)

As a result of the class you are born into and raised in, class is your understanding of the world and where you fit in; it's composed of ideas, behavior, attitudes, values, and language; class is how you think, feel, act, look, dress, talk, move, walk; class is what stores you shop at, restaurants you eat in; class is the schools you attend, the education you attain; class is the very jobs you will work at throughout your adult life. Donna Langston (2007, p. 119)

Before addressing the specific intersections of gender, race, and class with regard to single-sex education, it is important to first establish definitions to understand exactly what is meant by these terms. The following discussion draws on sociological, feminist, and critical theories to provide a framework and working definitions for gender, race, and class. While there are a variety of theoretical approaches to understanding gender, race, and class, social construction is a common theme in recent sociological theories of these

concepts. Andersen and Collins (2007) argue that gender, race, and class are all socially constructed categories that produce systemic forms of inequality. Theories of social construction are generally developed in opposition to theories of biological differences. While arguments of biological differences used to be generally accepted for gender, race, and class, due to shifts in social norms this is no longer the case. Rather, arguments of biological differences between race and class groups are now generally considered to be discriminatory. In contrast, theories of biological differences between the genders, which are assumed to correlate directly according to the binary sexes, are considered reasonable and often backed by scientific data. The following chapter focuses primarily on the role of social construction in the formation and perpetuation of gender, race, and socioeconomic class classifications; additionally the chapter explores the use of science in perpetuating gender differences.

Gender

The concepts of sex and gender are frequently and mistakenly conflated in popular discourse. Feminist scholars have traditionally distinguished between these terms arguing that sex is defined as the biological differences between male and female bodies (hormones, chromosomes, and genitals) whereas gender is defined as the social interpretation of sex that results in the categories of man and woman, masculine and feminine. Presumably, one who is born with a female body will grow up into a woman and exhibit feminine characteristics, whereas a person with a male body will develop into a man with a masculine demeanor. While the naturalness of sex differences is not commonly called into question, feminist and gender theorists frequently propose that gender is a socially constructed phenomenon (Butler, 1990). Basic social constructionist

arguments presume that gender differences are not natural, but rather are a result of the societies in which we live; and because gender is not a naturally occurring phenomenon, there is an underlying assumption that the constructions of gender are specific to cultures and times and that these constructions can be altered.

Theories of social construction frequently focus on two different but inter-related societal influences: interactions and institutions. In their groundbreaking article titled “Doing Gender,” West and Zimmerman (1987) discuss the construction of gender through interactions. West and Zimmerman define gender as “the activity of managing situated conduct in light of normative conceptions of attitudes and activities appropriate for one’s sex category” (p. 127). They further elaborate that gender is a routine accomplishment embedded in everyday interactions, meaning that gender displays and roles are produced and reproduced through the social interactions between and among people. West and Zimmerman argue that through interaction, individuals organize their various activities to reflect or express specific gender norms. Likewise, individuals are disposed to interpret the behavior of others through accepted gender norms as well. West and Zimmerman argue that routine interactions produce gender and make it seem a natural occurrence, when it is actually a socially constructed phenomenon. In the case of single-sex education, these routine interactions include the daily interchanges between teachers and students. Sufficient evidence suggests that teachers treat students differently based on the gender of the student (AAUW, 1992); due to established gender norms teachers treat students in gender-specific manners and students respond according to gender norms as well. In these interactions the students and teachers are doing gender, and their interactions reinforce pre-existing gender norms.

Building on West and Zimmerman's concept of doing gender, Judith Butler (1990) develops a theory of social construction resulting in gender as a performance. Butler notes that gender is frequently considered an internal essence (linked to sex), but she argues instead that gender is actually manufactured through acts, or performances. These acts, both political and cultural, produce and maintain standard gender classifications and norms. Butler argues that individuals can only be understood to others through becoming gendered and conforming with recognizable standards of gender norms. Gender coherence is a regulatory practice that acknowledges individuals who conform to accepted forms of gender performance and rejects those who do not. For example, single-sex schools assume that there are only two genders—girls and boys—and assumes that students have distinct personalities and learning styles based on these genders. Although many students do easily fit into these gender divisions, there is a significant number of students who do not easily fit into these categories; gay, lesbian, transgender, and intersex students may all defy standard boy/girl divisions and they are incomprehensible in the framework of single-sex education. For Butler, a significant portion of accepted gender performance is manifested in compulsory heterosexuality—the idea that heterosexuality is not a naturally existing norm, but rather compelled on individuals through various societal influences. Many theorists believe that compulsory heterosexuality is a byproduct of society's gender norms, but Butler argues the opposite, that compulsory heterosexuality is the societal force which reinforces our existing gender norms and ultimately defines what is, and what is not, gender coherence. Within Butler's framework, the recent support for single-sex education could be read as a conservative and homophobic response to breakdowns in traditional gender norms, and traditional

heterosexuality. Supporters of single-sex education do not explicitly state that they seek to reign in all gender deviants, but their insistence on distinct separations between the genders suggests that they believe the differences are “natural” and should be maintained.

Complementing these views of gender as interaction, many theorists understand gender as produced by societal institutions. One such theorist is French philosopher Michel Foucault, and although his work did not frequently focus on the production of gender, his theories of the importance of social institutions in identity formation have proven useful for understanding the production of gendered identities. Foucault’s most famous institutional study is found in the book *Discipline and Punish: the Birth of the Prison* (1977). In this volume Foucault outlines the system by which power and knowledge are interrelated; discipline and surveillance are used by prison guards to create a docile population of prisoners who eventually come to police themselves, and therefore no longer require surveillance. While Foucault’s work focuses primarily on the prison, he uses this as a metaphor for society at large, arguing that through surveillance and disciplinary actions western society [re]produces subjects who follow the rules as dictated. By applying Foucault’s ideas of identity formation through institutions to gender, one could argue that gender is produced and reproduced through the surveillance and disciplinary action of societal institutions, such as schools. Subjects in schools are taught not just math and English, but they are also taught to follow the rules of society’s gender norms. Once in the segregated classrooms girls and boys would learn their appropriate gender norms, and they would learn how to avoid punishment for misbehavior (gender-bending), eventually students would follow the gender norms and actually incorporate them as part of their gender identities. Thus the gender identities of

boys and girls are shaped by social institutions (such as schools) and single-sex schools that incorporate gender differences into the separate classrooms would arguably increase differentiation between the gender binary.

Although the specifics of West and Zimmerman, Butler, and Foucault all differ, all of their theories hold a central theme that gender is a socially constructed phenomenon. While social construction is accepted as a prominent theory in academic and feminist circles, mainstream society does not always define gender as socially constructed. Supporters of single-sex education are generally opposed to the social construction of gender, instead arguing that gender differences in personality and learning styles are natural consequences of biological differences between the sexes. Arguments supporting single-sex education rely on both assumed sex differences and gender differences. Specifically, sex differences—such as brain development differences and differences in hearing abilities, cited by Sax (2005)—are used to argue for single-sex education. But gendered (that is, social) differences are also incorporated into these arguments. Advocates for single-sex education discuss the differing social experiences of boys and girls in classrooms as a reason to separate students based on sex (Caplice, 1994). As an example, Sax (2005) discusses the differences in aggression patterns of boys and girls, noting that girls who bully are frequently popular and work with other girls to bully a single girl, whereas boys who bully are loners who work alone in their bullying efforts. Sax cites a study of two year olds in which the boys were more likely to prefer a violent story whereas the girls were more likely to prefer a warm and fuzzy story. He also introduces evolutionary biology to suggest that males are more inclined to violence because of the useful purpose this skill serves in killing prey whereas females

are more inclined to nurturance because of their role in raising the young of the species. Despite his best efforts to naturalize the aggression patterns of boys and girls, he fails to demonstrate how this results in different bullying techniques. Additionally, he fails to link aggression to any specific element of biological sex (are aggression patterns determined by chromosomes, hormones, or genitals). Finally, Sax fails to recognize that not all men are violent and not all women are nurturing. To contrast this view, most feminists and sociologists would argue that aggression and patterns of bullying are socially constructed aspects of gender. Near the end of *Why Gender Matters* Sax (2005) explicitly denies the significance of social construction, contending that the past thirty years have been replete with studies of social and cognitive aspects of gender. He argues that gender is primarily innate.

Supporters of single-sex education generally point to biological brain differences and learning differences between the sexes as the justification for segregating students based on sex. They argue that sex and gender differences are naturally occurring (not related to social institutions and interactions) and due to these differences boys and girls require separate and different learning environments. Most social constructionists counter that learning and performance differences are the result of socially constructed norms and roles, but despite their skepticism of natural differences social constructionists have a difficult time debunking the prevalent acceptance of biological differences between the sexes. US culture remains divided over the causes of sex and gender differences; at one end are the Leonard Saxes who believe that differences are biologically based (nature), at the other end are feminists and social constructionists who believe that differences are socially based (nurture), and many members of the general

public often find themselves believing in some combination of these elements. While debates concerning the true cause(s) of sex and gender differences remain unresolved, it is exceedingly significant that natural biological differences remain a prominent and acceptable part of the sex/gender differences discourse. Scientific studies, media reports, and popular books all present boys and girls (men and women) as natural opposites; rarely is this line of discourse questioned.

To contrast, discourses of biological differences are not considered socially acceptable in discussions of racial and class differences. While there are some fringe groups that believe in race and class differences as biologically based, mainstream culture accepts social construction as the major cause of differences between race and class groups. Arguably, it is the saliency of biology in discussions of sex/gender differences and the lack of saliency of biology in race and class differences that makes separating students based on sex/gender an acceptable option in the US and makes separating students based on race or class unacceptable (discriminatory). Because it is acceptable to say that there are naturally occurring differences between the sexes/genders then it is also acceptable to separate students along these lines. However since it is discriminatory to say that there are naturally occurring differences between the races or socioeconomic classes then it is likewise discriminatory and not acceptable or legal to separate students by race or socioeconomic class.

Although biological brain differences between the sexes are often taken as assumed fact, feminist scientists have long challenged these arguments and instead found that scientific studies claiming biological differences between the sexes are themselves influenced by social factors (including gender). Fausto-Sterling (2000) argues that

scientists are not immune to bias; social reality shapes their views and subsequently shapes the scientific knowledge that is produced. Noting that studies frequently find large overlaps between boys and girls brain structure, Fausto-Sterling argues that we do not know enough about brain functions to make significant claims of brain differences and abilities. Eliot (2008) reiterates that the range of brain differences within groups is much larger than differences between the sexes. Arguing that brain size and shape are correlated more accurately with body growth than with cognitive abilities of the sexes, Eliot stresses that scientific studies displaying gender *similarities* are rarely reported to the public. Fausto-Sterling also posits that brain differences may not be entirely natural, but instead could be the result of environmental stimuli—if we treat boys and girls differently their brains may develop differently to match social norms. Critiquing studies of primatology, Haraway (1991) argues that the discipline is largely masculinized and biased. Specifically, studies of primate sexuality often present the male as an aggressor in contrast to the passive female receptacle; these studies are then used to legitimate male sexual aggression as natural for humans because primates are considered the natural—non-socialized—versions of humans. The work of Haraway and other feminist scientists stresses that science and scientists are not without bias and that the so-called objective sciences are often used in political and discriminatory manners. Haraway's work challenges the objectivity of science and encourages the consideration of culture in understandings of the creation of scientific knowledge. Fausto-Sterling points to societal disagreements over gender equality as the perpetuating force behind the saliency of biological sex/gender differences. Thus, if the US developed a firmer stance against sexism, then biological claims of natural sex/gender differences in brain development and

assumed ability would no longer be acceptable in American discourse. While much remains unknown about brain development and function, neuroscientists have discovered an almost limitless plasticity of the brain in learning abilities, and this is especially true for children (Eliot, 2008). The work of Fausto-Sterling, Haraway, and Eliot suggests that sex/gender differences in brain development and learning styles are not necessarily as naturally occurring as often assumed; instead prevalent social construction is biasing the findings of scientific studies (causing scientists to interpret natural phenomenon to match their beliefs about sex and gender) and making sex and gender differences seem more natural than they actually are. While the biological basis of gender differences is acceptable in mainstream US discourse, this is not the case for race and class differences. Instead race and class differences are generally accepted as socially constructed and to argue otherwise (biologically) is considered discriminatory.

Race

Scientists concluded in the early twentieth century that racial categories were arbitrary and not related to any biological referent (Glenn, 2000), but presumed biological differences among the races remained viable in American discourse decades after this conclusion. Supporters of racial segregation argued that biological brain differences were to blame for the lower achievement levels of black students (Wolters, 2008). Opponents argued that socioeconomic class, historical discrimination, and other social factors were causing racial achievement gaps. Since the 1950s and subsequent civil rights movement discussions of biological differences between races have become less socially acceptable in the US; today it is considered discriminatory to assert racial differences based on

biology. Critical race theory has played a significant role in developing theories and arguments of race as a social construct.

One pair of theorists who have been fundamental in the development of critical race theory is Omi and Winant. Omi and Winant (1994) define race as “a concept which signifies and symbolizes social conflicts and interests by referring to different types of human bodies” (1994, p.55). Although they acknowledge a biological base in definitions of race, Omi and Winant stress that the selection of human features for purposes of racial signification is an inherently social and historical process. Omi and Winant introduce their theory of racial formation, which they define as “the sociohistorical process by which racial categories are created, inhabited, transformed, and destroyed” (1994, p.55), to include understandings of race as both social structural and relational. Thus their theory of racial formation includes elements of both institutional and interactional influences such as the labor market (institution) and cultural interactions. Italian philosopher Antonio Gramsci developed a theory of cultural hegemony to explain how capitalists maintain dominance over the working class by developing a consensus mentality in which the working class believes that the best interests of the ruling class are also their own (Forgacs, 1988). Hegemony maintains the status quo and keeps the working class (those without power) from rebelling against the ruling class. Omi and Winant apply Gramsci’s theory to race and argue that racial order is maintained in democracies through systems of hegemony.

Henry Louis Gates Jr. is another leading social theorist in the area of critical race studies. In his book *Race, Writing, and Difference* (1986), Gates Jr. argues that popular usages of the term race can exhibit both described and inscribed differences. By saying

that racial differences are inscribed, Gates Jr. is suggesting that discourses of racial differences actually work to reproduce such differences. Thus the production of racial difference is cyclical—seemingly natural—but actually caused by social construction. Gates Jr. notes that racial differences are discussed in terms of culture, linguistics, and belief systems. In addition to the social construction of these differences, Gates Jr. argues that power and knowledge are inherent in discourses of race. The power/knowledge dynamic in racial discourse results in inequalities based on racial differences. Most notably, Gates Jr. cites the links between racial alienation, literacy, and economic alienation. He discusses racial differences in reading and writing, noting that in centuries past Europeans believed that Africans were biologically incapable of reading or writing. However, it was actually due to power structures that blacks were not given the opportunity to learn reading or writing skills. Once given the opportunity to learn these skills many blacks responded to allegations of this inability by writing books, poetry, autobiographies, and political and philosophical discourses.

The theories of Omi and Winant and Gates Jr. argue that race—as a meaningful social classification—is not a biological fact, but instead is socially constructed through institutions, interactions, and discourses. While mainstream discourses do not necessarily comprehend the intricacies of these theories, it is commonly accepted in US culture that racial differences are based on social experiences rather than biological determinism.

Class

Class categories are frequently understood as socially constructed, but the meaning of this social construction is quite contested. For generations, the concept of the American Dream has permeated class discourse in the United States. According to the

American Dream, everyone has the right to financial success, regardless of his or her background; it is assumed that anyone can succeed if they work hard enough towards their goals. Despite the popularity of the American Dream, Warner, Meeker, and Eells (1960) point to a fundamental contradiction in its logic; The American Dream assumes first that all Americans are equal and second that all Americans have the right to the chance to reach the top. However, if all Americans were equal, there would be no top to which they would all be striving. The American Dream becomes even more problematic when considering the capitalist economy—which relies upon the unequal distribution of resources—of the US. This inequality of resource distribution based on socioeconomic class is referred to as class stratification.

A significant misperception of socioeconomic class is that it only refers to the amount of money a person or family has. This limited definition fails to recognize the complexity of class and the multitude of meanings it can have. Langston (2007) stresses that class is more than income; it is economic security as well as many cultural elements.

As a result of the class you are born into and raised in, class is your understanding of the world and where you fit in; it's composed of ideas, behavior, attitudes, values, and language; class is how you think, feel, act, look, dress, talk, move, walk; class is what stores you shop at, restaurants you eat in; class is the schools you attend, the education you attain; class is the very jobs you will work at throughout your adult life (Langston, 2007, p. 119).

This expanded definition understands socioeconomic class as socially constructed and “all-encompassing”; this definition breaks through the myth of the American Dream and demonstrates how class background infiltrates all aspects of life. Because class is so “all-encompassing” it can perpetuate social stratification in multiple ways. Schools are just one example of a social institution that maintains social stratification.

Pierre Bourdieu (1974) explores the role of schools in maintaining class stratification; he notes that the school system is often assumed to be a liberatory force, a route to upward mobility, but instead the school actually serves as one of the most effective means of maintaining the current social order. Rather than focusing on economic status alone, Bourdieu (2007) examines three different types of capital: economic, cultural, and social. Economic capital refers to a person's financial wealth. Cultural capital refers to a person's cultural goods—such as books, instruments—and their long-term dispositions, both of which are generally passed down through familial generations. Social capital refers to a person's network of relationships. When considering all three of these forms of capital, Bourdieu argues that cultural capital is particularly instrumental in the perpetuation of social stratification through the school system. Bourdieu asserts that the cultural capital of the upper and middle classes are valued more in schools, whereas the cultural capital possessed by poor and working class students is disvalued by schools and society at large.

Bourdieu's definition of class incorporates not only the possession of economic goods, but the possession of cultural and social goods as well. Similar to Langston's definition, Bourdieu understands class as more than just a person's annual salary and financial assets, but also their possession of certain valued cultural goods and their connections within established social networks. If, in fact, schools do value the cultural goods of upper and middle class students more so than those of poor and working class students, then Bourdieu's expanded definition of socioeconomic class is quite suitable for examining the perpetuation of class stratification. Additionally, Bourdieu's definition of

class suggests that rather than being solely determinate of economic relationships, socioeconomic classes are largely socially constructed.

Intersectionality

No individual experiences gender, race, or class in isolation; all individuals possess gender, race, and class identities, and the only individuals who do not recognize their own gender, race, or class identity are members of a privileged identity classification (i.e. male/man, white, or upper/middle class). Likewise, the theories discussed in this chapter should not be considered in isolation, but instead considered together as intersecting frameworks for understanding the overlaps of gender, race, and class as meaningful classificatory systems. Theories of intersectionality seek to develop models for understanding the interconnectedness of situated classifications and identities. Many of the theorists discussed actually do incorporate aspects of intersectionality into their theories of gender, race, and class, often focusing on one of these areas primarily, but acknowledging the significance of that area's (either gender, race, or class's) intersection with others. For example, Omi and Winant (1994), while focusing primarily on racial formation, acknowledge that gender, race, and class are all socially constructed and that they overlap and intersect with each other in countless ways. Additionally, they argue that there are no clear boundaries between these classifications, and that political conflicts frequently involve gender, race, and class simultaneously.

The work of Patricia Hill Collins has been recognized as a leading contribution to theories of intersectionality. In her groundbreaking work *Black Feminist Thought* (1990) Collins introduces the theory of the matrix of domination, which she defines as “the overall social organization within which intersecting oppressions organize, develop, and

are contained” (p. 228). The matrix of domination shows how individuals are impacted by the intersection of various forms of oppression resulting in unique experiences depending on one’s position within the matrix. Throughout the book Collins uses the example of black women and their experiences of oppression; as women they experience a continuing history of sexism and likewise as African Americans they experience a continuing history of racism. The intersection of these oppressions causes black women to experience sexism differently than white women and to experience racism differently than black men. In addition to sexism and racism the matrix of domination is further complicated by other systems of oppression such as classism, heterosexism, and ageism as well as countless other classifications.

By applying Collins’ theory of intersectionality to single-sex education, it becomes apparent that there are no only-boy and only-girl students. Instead these boys and girls are members of various other socially constructed classifications such as racial groups and socioeconomic classes. And, not only are these classifications intersecting, but they can also lead to intersecting forms of oppression. Arguments for single-sex education are inherently limited and arguably problematic because they fail to recognize any other classifications besides sex/gender. While single-sex education only acknowledges the significance of sex/gender as meaningful sites of difference between US school children, analyses of this educational practice need to explore how single-sex education intersects with race and class as well as examine what meanings it has for these classifications.

Social Construction and Single-Sex Education

The theories of gender, race, and class presented above all suggest that these classifications are not naturally occurring, but instead are socially constructed. Human interactions, discourses, and institutions are all implicated as sources of social construction. When studying educational systems we must ask not just if education plays a role in social construction, but instead ask what that role is and what effects it has on the constructions of gender, race, and class. Thus, studies of single-sex education must ask first what constructions are used to justify the need for single-sex education, and second ask what constructions will be perpetuated by single-sex programs in US public schools. The need for single-sex public education is frequently justified through claims of biological differences between boys and girls and proponents also point to performance gaps between the sexes as evidence of such biological differences. The use of performance gaps between boys and girls is discussed further in the next chapter of this thesis. Interestingly there are significant performance gaps based on gender, race, and socioeconomic class, yet biological differences are only employed in explanations of gender gaps, not in race or class gaps. Chapter 5 of this thesis addresses the latter question of single-sex education perpetuating social constructions of gender, race and class.

Chapter 3: Performance Gaps: Intersections of Gender, Race, and Class in Measures of Academic Achievement

Educational achievement is not a zero-sum game, in which a gain for one group results in a corresponding loss for the other. ... Understanding disparities by race/ethnicity and family income level is critical to understanding girls' and boys' achievement.
American Association of University Women
(2008, pp. 2-3)

Much of the support for single-sex education is based on the belief that boys and girls have different (“hardwired”) learning styles, and that these differences lead to significant gaps in educational performance. For example, girls are said to lack self-confidence in science and mathematics disciplines and they are likewise underrepresented in these career fields (Tindall & Hamil, 2004). Boys, on the other hand, lag behind girls in reading performance (Husain & Millmet, 2009). Those who believe in brain differences between the sexes argue that the dichotomy of girls lagging behind in math and science and boys lagging behind in reading is a direct result of the differences between female and male brains. Scientists and social scientists counter the “hardwired” brain differences argument, suggesting instead that any gender gaps that currently exist in education are caused primarily by social and cultural factors such as discrimination and gender norms. Although there are significant differences between the average performances of boys and girls in school, there are also significant differences in

academic achievement based on race and class background. Many sources argue that socioeconomic class is by far the best predictor of academic performance (e.g., AAUW, 1992). While gender gaps in education are commonly credited to biological differences, making the same biological differences argument for race and class gaps in education is considered discriminatory. This chapter documents the general trends of US educational achievement gaps based on gender, race, and class. In such a discussion it is important to remember that these classifications are not mutually exclusive; no student is bound to only a gender, race, or class classification, but rather every student has a place in all of these classifications. By applying Collins' matrix of domination we can understand performance gaps as complex expressions of gender, race, and class oppression.

Gender Gaps in Education

Since the 1960s studies have documented gender achievement gaps in reading, mathematics, and science among US students. Girls consistently outperform boys in assessments of reading. Although boys and girls perform similarly in elementary math, by middle and high school boys tend to move ahead in math. Similarly, boys outperform girls in science and their lead in this subject is measured at all academic levels (Ma, 2008). In 1992 the American Association of University Women released a report specifically addressing the gender gaps in American education, seeking to break the myth that boys and girls receive equal education and specifically documenting the ways in which schools "shortchange" girls. Citing studies from the 1980s and early 90s, the AAUW noted that the gap between boys' and girls' reading and verbal skills was minimal. Addressing the gender gaps in math, the AAUW praised recent efforts to empower girls in math courses and noted that although the gender gap in math had not

disappeared, girls were pushing ahead in math and the gender gap in this subject area was steadily decreasing. The report's findings on the gender gap in science were less celebratory: the AAUW found that boys still outperformed girls in science class and achievement. Rather than pointing to brain differences to explain the remaining gender gaps in education, the AAUW argued that societal factors were causing these gaps. Specifically they noted that boys receive more attention from teachers (from pre-school through college), that boys are more likely to see themselves reflected in course materials, and that societal pressures frequently lead to large drops in girls' self-esteem (AAUW, 1992).

In the mid 1990s, as organizations such as the AAUW were focused on the educational disadvantages facing American girls, a backlash of others began to argue that it was boys who were actually getting shortchanged by education. This backlash grew into what is known as "the boy crisis" and its proponents argue that current educational practices are not geared properly for the ways in which boys learn (Gurian, 2005). Popular media became flooded by reports of boys falling behind in academic achievement, boys graduating from high school less frequently than girls, boys enrolling in college less than girls, and boys falling behind in verbal skills (Rivers & Barnett, 2006). Additionally, the fact that boys tend to get slightly lower grades in school solidified the evidence for a boy crisis frenzy. As discussed in Chapter 1, the existence of a boy crisis is one of the major reasons for recent interest in single-sex education. Like proponents of single-sex education, believers in the boy crisis argue that boys and girls are hardwired differently; these brain differences lead to different learning styles and needs of boys and girls, and the boy crisis argues that American schools are failing to

meet the differing educational needs of boys. Conservative commentators have latched on to the boy crisis arguing that it is proof that feminism has had a negative impact on schools, causing them to give girls more attention, and invariably leaving boys at a disadvantage (Vail, 2006).

But despite the media frenzy of a growing boy crisis in which American boys are falling further and further behind the girls in their communities, many educational experts and social critics argue that the boy crisis is a myth. One of the main pieces of evidence of the boy crisis is the fact that boys receive lower grades in school. Sadker and Sadker (1994) addressed this fact; they argued that although boys do receive slightly lower grades, they continue to outperform girls on standardized tests such as the PSAT and SAT. The SAT tests students on math and verbal abilities and boys score higher than girls on both sections (despite the fact that boys are said to lack verbal skills compared to girls). More recent data continue to show boys outperforming girls on the SAT and other standardized tests (Heuman, 2002). Schiebinger (1999) examined studies of student grade attainment and found that girls do earn slightly higher grades and that this is primarily due to their more consistent handing in of homework; suggesting then that boys receive lower grades not because they are learning less but because they are less likely to consistently turn in their homework. Others stress that reports of the boy crisis fail to take into account race and class factors, and that when these factors are included the image of a boy crisis becomes much different—namely a crisis facing inner-city and rural boys, but not white suburban boys (Rivers and Barnett, 2006).

The AAUW is especially critical of the boy crisis rhetoric. In their recent report “Where the Girls Are: the Facts About Gender Equity in Education” the AAUW (2008)

stresses that while girls have pulled ahead slightly in some measures (grades and college admittance) both boys and girls are doing better than ever in school. From this fact, the AAUW argues that education is not a zero-sum game, arguing that educational gains for girls do not come at the expense of educational losses for boys. Addressing the gender gaps in college attendance, the AAUW notes that women are filling more college seats because many women are returning to college as non-traditional students. Rivers and Barnett (2006) confirm that gaps in college enrollment are among non-white students—white men and women are enrolled at very similar levels, 49 versus 51 percent respectively. The AAUW report also stresses that gender gaps need to be examined through the lenses of race, ethnicity, and family income—when these classifications are considered it becomes clear that what has been called a “boy crisis” is really a crisis facing black and Hispanic students of both genders.

Leonard Sax (2005) and other supporters of single-sex education believe that there are significant “hardwired” learning differences between boys and girls and that there is a boy crisis in American education caused by coeducation’s inability to address these differences. Gender gaps in educational achievement are used as evidence to support both the claims of learning differences and a boy crisis, but what if these claims are false? What other evidence could be introduced to explain the existence of gender gaps in education? Social scientists have identified a variety of different factors that they believe contribute to gender gaps in education. Ma (2008) argues that schools and communities practice gender-differentiated socialization that leads to different (socially produced) achievement norms of boys and girls. These achievement norms are created and maintained through traditions, cultures, and ideologies. Others cite social equality as

a factor in the achievement norms of boys and girls; in a recent study comparing math scores of boys and girls from 40 different countries, gender gaps decreased as measures of women's equality increased (Guiso et al., 2008). Low self-esteem (presumably caused by cultural norms) is frequently cited as a reason that girls lag behind boys in math and science. When educators actively encourage girls and promote positive self-efficacy they tend to do better in these subject areas (Alexakos & Antoine, 2003). In their 1992 report the AAUW cites the development of gender roles as significant contributors to gender gaps in education. From the time of a child's birth society has gender-specific expectations for that child and the child is treated distinctive ways because of these expectations. The report specifically cites the experiences of girls and recognizes that girls—especially middle and high school girls—frequently experience lower self-esteem than boys of the same age. While boys' challenges are not specifically addressed in the report, the theme of gender roles can also be used to explain many of the ways in which boys are falling behind, basically suggesting that the boy crisis is a social phenomenon (not the result of biological differences). The alternative explanations discussed in this paragraph vary in their details, but are similar in their adherence to the importance of the social construction of gender. Not only do constructions of gender determine how boys and girls dress and what toys they prefer, but these constructions also have profound consequences for their educational opportunities and future achievement potentials.

Achievement Gaps Associated with Race and Class

The gender gap is not the only relevant achievement gap in the US. Race and class background also present significant gaps in students' achievement. Bali and Alvarez (2004) state that there is a significant gap between the achievement of black and

Hispanic students compared to that of white and Asian students—this gap persists at all levels of education and even when these students attend the same schools. Compared to their white and Asian peers, black, Hispanic, and Native American students are more likely to attend lower quality schools with diminished resources, receive lower grades, more likely to drop out of high school, and fail to graduate from college (Dabady, 2003). Dabady argues that these race gaps in education are the effects of historical racial exclusion and discrimination. Similarly, Farkas (2003) notes that black, Hispanic, and Native American students start school with lower language levels, lower pre-reading skills, and lower pre-math skills than their white and Asian peers. These entry gaps are attributed largely to lower socioeconomic class backgrounds of black, Hispanic, and Native American Students. Farkas argues that if these entry-level gaps were eliminated, the future racial gaps in high school would decrease significantly. Studying the gap between white and black students, Jencks and Phillips (1998) find that although race gaps in education still persist, these gaps have decreased significantly since the 1970s. They argue that poverty, single-motherhood, and inadequate schools do not fully explain these gaps; instead pointing to more complex psychological and social factors as contributing to race gaps in education. In their 1992 report the AAUW argued that while educational performance varied due to race, much, but not all, of this variance decreases when students from the same socioeconomic class are compared. This brings to light an important point: that racial minorities are disproportionately represented in the ranks of lower socioeconomic classes. While analysts do not agree as to the precise causes of the race gaps in education, most of them do concur that poverty is part of the equation along with other social and cultural factors.

Many analysts believe that class background is the single-most important factor in determining students' success (AAUW, 1992). As discussed in the previous chapter, poor neighborhoods often have poorly funded schools because the residents of these neighborhoods are less able to provide a sufficient property tax base to adequately fund their schools. Thus students from lower socioeconomic classes are often doubly burdened, first by having low family incomes and second by attending poorly funded schools. Hochschild (2003) points to the disproportionate failure of urban schools—poorly funded and attended by poor, mostly minority, students—as a demonstration of this double burden. She argues that poor students bring specific problems to school—poor health, poor nutrition, instability in their family lives, frequent moves, residence in unsafe neighborhoods, few educational resources in their homes, and family members with poor educational backgrounds—which contribute to their likelihood of limited performance potential. Students from lower socioeconomic backgrounds have the lowest scores on the SAT, ACT, and other standardized tests (AAUW, 2008). Clark and Corski (2002) studied the digital divide in education noting that gaps in computer literacy and skills are widening—students of lower socioeconomic classes have lower technology literacy and skills compared to their wealthier peers. The authors stress the significance of the digital divide comparing current gaps in technology literacy to gaps in reading literacy from a century ago; reading literacy used to be the key to education and career success, but technology literacy has taken its place in guaranteeing, or hindering, a student's future success. In a recent meta-analysis, Sirin (2005) compared studies of educational achievement and socioeconomic class, concluding that since the 1990s there

has been a slight decrease in the correlation between socioeconomic class and educational achievement, however a medium to strong correlation persists.

Intersections of Gender, Race, and Class Gaps

Many analysts who study educational achievement gaps recognize that these gaps are not isolated, but rather are frequently intersecting. As members of multiple oppressed groups, students are simultaneously affected by multiple educational disadvantages. Because educational achievement gaps are already complex, few analysts study the intersections of gender, race, and class gaps in education. In their 1992 report the AAUW attempted to address the intersections of educational gaps, the most significant finding of which was the bipolarity of girls' achievement—girls from lower socioeconomic class backgrounds are more likely to do better than boys from the same class background, whereas girls from higher socioeconomic class backgrounds are likely to lag behind similar boys. The report also addressed the fact that black, Hispanic, and Native American students are much more likely to come from lower socioeconomic class backgrounds, thus their educational experiences are often affected by both race and class oppression. These are just two examples of the intersections of educational gaps; more research is needed in this area, but it is also important to remember that students' educational experiences are infinitely complex.

The sources introduced in this chapter confirm that there are significant educational gaps, and that these are gender gaps, race gaps, and socioeconomic class gaps. While supporters of single-sex education point to presumed biological differences as the root cause of gender gaps in education, many analysts believe that gender, race, and class gaps are the result of complex social constructions. These complex gaps

become even more complicated as we recognize the intersections of gender, race, and class gaps in educational achievement. Despite the negative reality of these educational gaps, there is a positive light at the end of the tunnel because some of these gaps are actually declining. Gender gaps in math, science, and reading have steadily declined since 1980 (Ma, 2008). Concerted efforts to empower girls in math achievement have helped to close gaps in this subject (AAUW, 1992). Girls are empowered to take more challenging courses in math and science and boys are closing the gap in both elementary and high school reading and writing skills (Eliot, 2008). Educational gaps between black and white students have also declined in the past forty years (Jencks & Phillips 1998). Arguably, efforts by feminists and civil rights activists, educators, and academics have had positive impacts on decreasing the large educational gaps of the past. Despite the recent frenzy toward single-sex education, the gains made toward closing gender gaps were accomplished largely in coeducational classrooms (Eliot, 2008). If we send students to single-sex schools, which are hyper focused on closing gender gaps, will these schools adequately address the education gaps based on race and class background, or would such schools simply assume that the educational gaps experienced by all girls or all boys are the same, and not recognize race or class intersections? Significant efforts are still needed to continue to close the remaining educational gaps, and it remains questionable as to whether or not single-sex schools can adequately address the complexity of such gaps. Maybe offering single-sex public schools could lead to further gains in educational achievement for both boys and girls, but according to that logic should we not also offer single-race and single-socioeconomic class schools? This moral question is also a legal question—whether or not we can segregate students based on

gender, race, or class differences—and US courts have responded by accepting gender segregation and rejecting race and class segregated classrooms. The legality of single-sex public education compared to single-race or single-socioeconomic class education is discussed in the next chapter of this thesis.

Chapter 4: Educational Segregation: the Legality of Separating Students by Gender,
Race, and Class

In an educational system with a history of segregation along gender, racial, and economic lines, the question of whether single-sex education promotes gender equity remains unclear. The legality of single-sex schooling, particularly for primary and secondary institutions, is similarly murky.

Meghan K. Carr (2007b, p.483)

At the time that the Simpsons episode “Girls Just Want to Have Sums” aired (April 2006) girls in the United States were protected against sex discrimination in publicly funded education and guaranteed relatively equal opportunities in school through Title IX of the Education Amendment of 1972. However, just a few months later in the fall of 2006 the Bush Administration and Department of Education (DOE) changed Title IX regulations making it easier for publicly funded schools, both elementary and secondary, to exclude (discriminate) admission based on sex (Kiselewich, 2008). The DOE sought to both legally protect the opening of single-sex public schools and to encourage the increase in such schools. The US Supreme Court has not yet reviewed the constitutionality of single-sex public education, so the DOE’s regulations currently stand as legal permission for public schools to explicitly and purposefully separate students by sex. To contrast, it is illegal for schools to explicitly or purposefully separate students based on their race or class backgrounds. But despite these explicit sanctions, many

school districts remain segregated by race and class due to neighborhood makeup and school funding and districting regulations. This chapter explores the differing legal standings of gender, race, and class in public school discrimination. Rather than serving as an exhaustive review, the chapter focuses on the key legislation and court cases that ultimately lead to different legal possibilities for separating students. However, before examining the specific cases and legislation regarding gender, race, and class in public schools, it is important to first understand the different judicial review that gender, race, and class receive. Arguably, these differences in judicial review are critical in determining the varying outcomes and possibilities for separating students by gender, race, and class in public schools.

Legal Precedents for Gender, Race, and Class Discrimination

Cases involving discrimination based on gender, race, and class receive different consideration under precedents set by the US Supreme Court. Discrimination cases are most frequently cited in violation of Constitutional guarantees of equal protection found in the 14th Amendment's equal protection clause and the 5th Amendment's due process clause. Equal protection implies that the law must treat all persons and groups equally regardless of gender, race, or class; this equal treatment suggests that the courts remain blind to the social classifications of gender, race, and class. However, the courts have deemed it permissible to use reasonable classifications in certain situations; Kay and West (2006) describe the classification system as follows:

The Constitution does not require that things different in fact be treated in law as through they were the same. But it does require, in its concern for equality, that those who are similarly situated be similarly treated. The measure of the reasonableness of a classification is the degree of its success in treating similarly those similarly situated. (p. 25).

The US Supreme Court currently follows a three-tiered scrutiny model to rule on discrimination cases challenging equal protection claims: strict scrutiny, intermediate scrutiny, and rational basis scrutiny. Strict scrutiny is currently reserved for cases of discrimination based on race, alienage, or national origin (Bhagwat, 1997); under strict scrutiny the government is permitted to classify and treat persons differently based on race in only the most extreme of circumstances. In order to pass the strict scrutiny test the government must prove that the racial classification serves a *compelling* government interest and that the classification is *narrowly* related to that interest (Fitzpatrick, 2003). To this day the Supreme Court has found the strict scrutiny test satisfied only three times—in a World War Two case justifying the internment of Japanese Americans, in a 1980s case justifying a 50 percent quota of black employees in the Alabama Sheriff’s Department, and in 2003 when the Supreme Court upheld the University of Michigan’s affirmative action admissions policies. Race is held to the test of strict scrutiny because the court has deemed it to be a suspect classification.

Unlike race, the Supreme Court has found sex and gender to be semi-suspect classes and accordingly it holds cases of sex or gender discrimination to the less severe test of intermediate scrutiny. Under intermediate scrutiny sex based discrimination must be *substantially* related to an *important* government interest. All other classifications, such as class background, are considered non-suspect classes and cases of discrimination are considered under the minimal rational basis scrutiny test. To pass the rational basis test classifications must be *rationaly* related to *legitimate* government interests (Bhagwat, 1997). From this brief discussion it is clear that legal cases challenging

gender, race, and class discrimination are decided on different standards; the different legal standing of these classifications is integral to understanding the legality of single-sex education. Rather than following the gender, then race, then class framework followed in previous chapters, we turn first to exploring the legality of racial classifications (discrimination) in education as the restrictions against single-race education are the most severe.

Race, Separate is not Equal

It is currently illegal to explicitly and purposefully separate students based on race. However, this was not always the case. When public schools opened in the US South in the 1860s racial segregation was the norm. At the time, segregation was a valuable option for black students; the alternative to segregated schools was not integration into racially diverse schools, but instead no schools for black students whatsoever (Wolters, 2008). Schools were of course not the only places in which racial segregation was enforced; Jim Crow Laws established *de jure* segregation of the races in public places such as restrooms, restaurants, and public transportation. The US Supreme Court questioned racial segregation in the case of *Plessey v. Ferguson*; this 1896 case involved a black man who challenged his arrest for riding in the car of a train that was reserved for white passengers. The US Supreme Court upheld the arrest, ruling that racial segregation was permissible if the facilities provided for blacks were equal to the facilities reserved for whites (Ware, 2008). This legal principle became known as the “separate but equal” doctrine.

Close to sixty years later in 1954 the US Supreme Court revisited racial segregation in the case of *Brown v. Board of Education of Topeka*. Much had changed in

the US between *Plessey* and *Brown*; following World War Two there was increased international pressure to end racial discrimination. There was also pressure from within the US to reconcile the nation's official policies with the country's basic principles of equality (Wolters, 2008). By the 1950s it was clear that the separate schools provided for black and white students were not equal. The Supreme Court applied the 14th Amendment's Equal Protection Clause in *Brown* to argue that the "separate but equal" doctrine had no place in public education. The case of *Brown v. Board of Education* remains a landmark decision effectively prohibiting racial segregation in American public schools.

In many ways the *Brown* decision was more ideological than practical. While the ruling expressly forbade school segregation, it did not impose integration of schools. In the case where the races fail to mingle, the ruling requires no action by the state or school districts to force integration of students (Wolters, 2008). Communities and neighborhoods were frequently racially divided; and despite recent gains for racial minorities the 2000 US Census revealed that racial segregation persists throughout the US (Ware, 2008). Thus while explicit segregation of the races in public education is illegal, *de facto* segregation due to the racial makeup of neighborhoods persists. This *de facto* segregation tends to negatively impact African Americans and Latinos who are more likely to live in poverty and attend poorly funded failing schools than are members of other races.

Gender, Separate can be Equal

The legal standing of sex segregation in education is much murkier than that of racial segregation. Cases have been decided both upholding sex segregation and

overruling its legality; similarly measures of intermediate scrutiny have been applied strictly in some cases and more leniently in others. With no legal precedent in place, Congress and the Department of Education have been granted the opportunity to legislate regulations on single-sex education, the most significant of which are Title IX and the 2006 DOE regulations on single-sex education.

Title IX of the Education Amendments of 1972 represents an attempt by the US Congress to ensure that students receive equal educational opportunities regardless of sex. Under Title IX schools receiving federal funds (whether public or private) cannot segregate on the basis of sex unless the boys' and girls' single-sex programs are comparable. Additionally, such programs must be deemed necessary to remedy the effects of past gender discrimination (Levit & Verchick, 2006). The legislation identifies physical education, human sexuality classes, and choruses as three exceptions in which single-sex programs are appropriate—the programs would not be required to be comparable or to remedy the effects of past gender discrimination (Carr, 2007b). Title IX does not explicitly prohibit single-sex education, but rather implies that such programs should only be implemented in limited situations. This murky legality of single-sex education generally discouraged schools from pursuing such programs. Thus for many years Title IX served as a limited roadblock to single-sex public education.

In the 1990s, as educational experts became more aware of the gender gaps in achievement, experiments in single-sex public education sprouted up in schools across the country. Successful single-sex schools—such as the Young Women's Leadership School of East Harlem—gained the attention of education experts and lawmakers alike. Two such lawmakers were Senators Kay Bailey Hutchison (R. TX) and Hillary Rodham

Clinton (D. NY), who coauthored an amendment to the 2001 No Child Left Behind Act giving millions in federal grant funds to public schools interested in starting single-sex programs (Levit & Verchick, 2006). Additionally this amendment required the Department of Education to review and release new regulations on single-sex education. After commissioning a review of scientific studies of single-sex education, on October 25, 2006 the DOE released its new regulations endorsing single-sex public education. The regulations permit single-sex programs in public schools if the programs serve an important objective, if the programs are evenhanded (there must be equivalent classes for both boys and girls), and if the programs are completely voluntary (meaning that a parent or guardian must consent to having their child attend a single-sex school). Additionally the DOE regulations require any public school implementing single-sex programs to complete periodic evaluations to determine whether the single-sex programs meet these regulations. The 2006 DOE regulations not only legalize single-sex public education in elementary and secondary schools, but also endorse these programs. The DOE justifies the regulatory change by arguing that single-sex education will provide an opportunity to improve academic achievement and increase the diversity of educational options available in US public schools (Carr, 2007a).

Arguably, the new DOE regulations endorse the notion that separate can be equal in public schools' sex segregated classrooms. The US Supreme Court has yet to hear a case challenging the new legality of single-sex public education, so the constitutionality of these regulations remains unclear. However, considering the lower—as compared to strict—intermediate scrutiny granted to cases of sex classification it is likely that the court would find no constitutional violations in single-sex public education.

Class, School Funding, and Districting

The goal of public schools is to provide students with a quality education free of charge; public schools play an integral part in the American Dream making it possible for any student to succeed beyond their economic means (Leone, 2008). Segregating students by class background has not been deliberate in the same way that segregating students by gender and race have been. However, this lack of explicit segregation does not suggest that class disadvantaged students receive an equal education compared to their more class privileged peers. In fact, quite the opposite is the case. Due to school funding and districting regulations schools are frequently *de facto* segregated by student class background; as a result poor students are left at an extreme disadvantage in their educational experiences. In *Savage Inequalities: Children in American Schools* Kozol (1991) brings to light the educational disadvantages facing poor urban students. The schools these students attend often lack very basic needs: running water, functioning heat, sewer backups, and textbooks. Kozol's book illustrates the severe class-based inequalities in American schools.

Public school funding schemes differ by state, but generally public schools are funded through a combination of local property tax revenues and state funds to compensate for differences in these revenues. These funding schemes frequently benefit school districts in wealthy suburbs with large local tax bases and burden rural and urban schools that are unable to raise as much tax revenue (Bosworth, 2001). Despite state efforts to equalize school funding, poor rural and urban schools are generally left with fewer resources and often struggle to provide students with adequate educational experiences.

Since the late 1960s court cases have challenged school funding schemes on the basis that these schemes enforce large inequities between wealthy and poor districts (Hanushek, 2006). In 1973 the US Supreme Court heard the case of *San Antonio Independent School District v. Rodriguez*; they ruled that the US Constitution does not support a fundamental right to education, that disadvantaged students do not constitute a suspect class, and that the equal protection clause is not applicable to school funding variances (Lundberg, 2000). The *Rodriguez* ruling effectively removes funding disparities from the national courts and leaves the states to rule as they may depending on their own constitutions. The results of these cases vary significantly, but in most rulings the states have been required to provide more educational funding to attempt equity in district funding. In a few states—Tennessee, Arkansas, and Ohio—the state supreme courts have ruled imbalanced school funding schemes unconstitutional. In Ohio the Superior Court required the state to restructure its funding scheme, and upon three further reviews the Superior Court ruled that the funding scheme changes were still unconstitutional and not sufficient to equalize school funding and required the state to restructure yet again. This back-and-forth effort between the Ohio legislature and Superior Court lasted from 1997 until 2003 at which point the makeup of the court had changed significantly and restructuring efforts subsided (National Access Network, 2008). While only one example, the Ohio case reiterates that despite the best-meaning efforts of state constitutions, legislatures, courts and communities it is extremely difficult to equalize school funding between wealthy and poor districts.

No Child Left Behind and the Future of American Education

The No Child Left Behind Act (NCLB) was passed by the US Congress in 2001 and signed into law by President George W. Bush in 2002. The legislation's main goals have been to close achievement gaps and raise the achievement levels of all primary and secondary students. It establishes a number of mandates including: that all public schoolchildren must reach academic proficiency by the year 2014, that public school teachers must be highly qualified, and that school districts will be held accountable for achieving state standards and specific consequences will be enforced on schools that do not (Rebell & Wolff, 2008). The act stands as the legislative culmination of a twenty-year movement for "standards-based" reform in public education. Previous standards-based reforms primarily took place at the state level, but NCLB greatly increased the role of the federal government in public education. Specifically, NCLB enlists the federal government to define when students are tested and on what subjects, define standards and methods for instruction, and define underperforming schools and determine their consequences (Kaestle, 2006). NCLB is historic not only for its great increase of government involvement in public education but also for its commitment to educational equality and for the bipartisan support it received in Congress. Yet seven years later the popularity for NCLB has waned—primarily because lack of funding made it impossible to fulfill many of the legislation's objectives and mandates—and it has become increasingly controversial among advocates, scholars, policymakers, and members of the media. Supporters argue that with proper funding NCLB will deliver on all of its lofty promises, while critics argue that the standards, testing, and accountability provisions are

inherently flawed and that the legislation's provision permitting students to transfer out of failing schools is highly problematic (Kahlenberg, 2008).

Despite the controversy, NCLB represents a new commitment by the federal government to ensure that all children—regardless of gender, race, or class background—receive a superior public education. President Barack Obama has reiterated this commitment; Obama believes that for the US to remain competitive in the global economy we must improve the American public education system. To back up this statement, in 2009 Obama committed \$100 billion in economic stimulus funds for education including \$33 billion to build and repair schools, \$54 billion to halt teacher cutbacks and program cuts, \$5 billion to reward innovative schools, and funds to help states develop standardized systems for measuring achievement—one of the key mandates of NCLB (Epstein, 2009). The Obama administration seems committed to ensuring all students—regardless of their gender, race, or class background—a superior public education; yet with this commitment the future of single-sex education remains unclear. Neither President Obama nor his Education Secretary, Arnie Duncan, has made statements on single-sex public education. Until such statements are forthcoming, single-sex public education remains legal and endorsed by the US Department of Education.

The Right to Choose

Regardless of all the arguments for and against single-sex education, public school programs that segregate students based on sex remain legal as long as they are voluntary. The Department of Education holds that parents must have the option to choose or decline single-sex public education for their children. While the majority of public schools remain coed, Leonard Sax and the National Association for Single Sex Public

Education believe that every parent should have the option to send their children to a single-sex public school (2009). But should parents have this choice? Why is it legally acceptable (even encouraged) for parents to chose to send their children to a single-sex school, when they cannot chose to send their children to a school that is purposefully set up to serve students of a single race or a single class? Although many public and private schools remain segregated by race and class due to neighborhood populations and residency patterns, it remains illegal to deliberately segregate students by either of these classifications.

In the case of race, the US courts hold racial classifications to a higher standard of scrutiny than gender/sex classifications. Racial minorities have suffered severely because of their status as non-privileged members of society, and the courts recognize that these persons still experience legacies of racial discrimination, even though *de jure* discrimination has been outlawed in the US. As for socioeconomic class, the federal courts do not recognize class as a suspect classification (most likely due to the capitalist ideology of our society) but many state courts and legislatures have ruled that all children within their jurisdiction deserve the right to equal educational opportunity. In the case of gender, the US Supreme Court has established gender as a semi-suspect classification and holds cases of gender discrimination to an intermediate scrutiny. Why is there this difference in legal ruling? By distinguishing race as a suspect class deserving heightened scrutiny and gender as a semi-suspect class deserving intermediate scrutiny, the courts are essentially legitimating discriminatory practices based on gender classifications as more acceptable than those based on racial classifications. This in turn suggests that the courts believe that there are more legitimate differences among genders than among

racism. Might this difference in jurisprudence be related to the differing acceptability of arguments of biological differences? As mentioned, discussions of biological differences between the sexes are considered reasonable although similar discussions of biological differences between the races are considered discriminatory. One could infer that the acceptance of the biological basis of sex and the subsequent supposedly natural differences between the genders is the defining factor that marks gender as a semi-suspect class which in turn leads to the legality of separating students by sex/gender in public schools. Despite the legal logic of school segregation, single-sex public schools are currently considered legal. As a result of the recent DOE rejection of restrictions on such educational programs as well as increasing mainstream support for single-sex education (led by Sax and the NASSPE) single-sex public schools and classrooms are increasing every year. At face value, these schools address gender and sex differences and have consequences for gendered interactions as well as for the constructions and meanings of gender and gender differences. However, these schools also have consequences for constructions of race and class difference. Such consequences are discussed in the next and final chapter of this thesis.

Chapter 5: Single-Sex Schools: The Societal Consequences for Gender, Race, and Class

Our workplaces are increasingly integrated, our marriages increasingly symmetrical. What message are we sending children when we tell them girls and boys are so different that we cannot even teach them together?

Lisa Eliot (2008, p. 11a)

As sites of social construction, the meanings of gender, race, and class are greatly impacted by social institutions. The public school system serves as a major social institution in the US, and a widespread shift to single-sex education could have significant consequences for the societal meaning of gender, race, and class. This final chapter explores the potential consequences of the growing, and government endorsed, trend of US public schools shifting to single-sex. The academic success of single-sex schools is varied—some single-sex schools such as the Young Women’s Leadership School of East Harlem raise the bar of academic achievement, while others such as the schools in the California single-sex experiment prove to be ineffective at improving academic achievement. Rather than debating the likelihood of single-sex schools raising academic achievement, this chapter focuses primarily on the possible severe social consequences of widespread shifts to single-sex education. The chapter closes with a

discussion of the incompatibility of single-sex education with efforts at multicultural education.

Gender: Boys and Girls in Two Separate Cultures

Supporters of single-sex education believe that boys and girls have “hardwired” personality and learning differences. They acknowledge that there is some variation among girls and among boys, but they maintain that single-sex education is both socially and academically beneficial for most students. Media reports of single-sex schools portray boys and girls doing almost opposite tasks in their sex-segregated classrooms (for example, at Carmen Trails School in Missouri the second grade boys learn facts and exercise at the same time, whereas the girls sit calmly and read while listening to serene classical music) (Bell, 2009). These reports imply that both boys and girls prefer the single-sex environment and that the separated classrooms enhance the learning of these students. What these reports, as well as Sax and the NASSPE, fail to recognize is the potential social risks of widespread shifts to single-sex public education. While there are potential individual benefits to single-sex public education, there are also consequences that will undoubtedly alter gendered interactions and change the social meanings of gender in our society. Specifically, widespread single-sex education could reinforce biological determinism, strengthen gender stereotypes, and further-stigmatize boys and girls who do not follow gender norms.

“Hardwired” biological differences between the sexes are used to justify separating students in public school classrooms, but the science behind these differences remains highly contested. Neuroscientists stress that studies of brain sex are still inconclusive; research suggests that human brains have enormous plasticity in learning

abilities, especially in childhood (Eliot, 2008). Feminist Linda Birke states that “To be determined by biology is to surrender to limitations, to deny the possibility of change (Birke, 1999, p. 1). Biological determinism essentially limited the acceptable gender positions for women (not allowing them access to most education, most professions, and most practices of citizenship). While the more recent studies of brain differences do not outwardly state that men and women should occupy different positions in society, are these studies really that far removed from the biological determinism of the past? The risk becomes even more severe as contested brain sex differences are used to change legal precedent and societal practices, such as legalizing separation of students by sex in public schools and the public acceptance of such schools opening. Opponents of single-sex education fear that the slope from brain sex differences to biological determinism is not too slippery and that all of the progress made in the last century—moving women beyond the limits of biological determinism—could be lost.

The fear of strengthening gender stereotypes is frequently cited by feminists and others opposed to single-sex public education (NOW, 2006, Carr, 2007b). Reports on single-sex classrooms (such as the one at Carmen Trails) often read like directions on gender stereotypes portraying boys as energetic and independent and girls as calm and cooperative. Single-sex classrooms create and enforce accepted norms of behavior for the boys and girls who attend them, so it is hard to believe that these classroom norms would not be influenced by gender stereotypes—permitting the boys to be actively moving about the classroom while expecting the girls to remain seated and calm. This would also likely reinforce and strengthen these stereotypes. Drawing on the work of Foucault (1977), social institutions play a major role in the identity formation of

individuals and groups of people. If single-sex schools develop different behavioral standards for their male and female students, the boys and girls will likely internalize these differences and develop different behavioral and identity patterns accordingly. Arguably the stereotypes influence the school, which in turn influences the students, and the stereotypes become reinforced and embodied in the population. Strengthening gender stereotypes is dangerous because it leads to limitations in accepted gender norms; eventually limiting the potential of boys and girls to very specific gender roles maintained by these stereotypes and norms. Again, feminists fear that single-sex schools will increase the already persistent gender stereotyping in our society (NOW, 2006), which could potentially reverse much of the progress of the feminist movement. Biological determinism and strengthening gender stereotypes is harmful to both boys and girls. Although feminists are often focused on the potential harms to girls, because girls and women have traditionally been held as second-class citizens, classrooms and societies that separate their populations because of contested brain differences and gender stereotypes would prove harmful to boys and girls, men and women. Such schools and societies would prove especially harmful to students who do not neatly fit into standard gender classifications

Single-sex schools would undoubtedly work to further stigmatize students who do not follow gender stereotypes and accepted norms. Feminist and queer theorist Judith Butler stresses the role of social interactions in the social construction of gender. In *Undoing Gender* Butler (2004) applies the concept of “recognition” to gender expression, arguing that restrictive gender norms limit the scope of recognition and mark those who do not fit within these norms as unrecognizable, and this lack of recognition can be

exceedingly harmful to these persons. By separating students by gender, single-sex schools are enforcing a dichotomous understanding of gender, and students who defy gender norms will be unrecognizable within this system. Single-sex schools will likely punish students who do not follow the accepted gender rules of their classroom, and as we have seen through media reports on single-sex schools these rules of accepted behavior are often influenced by gender stereotypes and are starkly different for boys and girls. Gay, lesbian, and transgender students—who frequently challenge the norms of gender and sexual identity—could be especially stigmatized by single-sex schools. Heterosexuality stands as one of the most steadfast gender stereotypes and norms in our society; single-sex schools—which often separate students because of the potential for sexual distraction by the opposite sex—undoubtedly reinforce heteronormativity and further stigmatize sexual minorities.

Communication experts have developed a two-cultures theory of gender asserting that boys and girls (men and women) are socialized into two different language groups and that the differences in their socialization lead to significant problems in communication between the sexes (DeFrancisco & Palczewski, 2007). Deborah Tannen's bestselling book *You Just Don't Understand: Women and Men in Conversation* (1990) is a well known example of the two-cultures theory; discussing women as emotional speakers and men as fact-focused speakers, Tannen demonstrates significant gender differences in communication patterns and suggests that understanding these differences will help to decrease communication problems between the sexes. Widespread single-sex education will likely increase the communication problems between boys and girls, and while separating the sexes may lead to less disruption in the

classroom, the consequences beyond the classroom could be severe. If boys and girls are socialized in two separate classrooms—two separate cultures—they could develop the lack of ability to communicate with members of another gender. They could also find it difficult to develop healthy friendships and relationships as well as work (either in employment or other social institutions) with members of another gender. The truth is that boys and girls do not live in two-cultures. They live in the same neighborhoods and communities, are citizens of the same country, and must face many of the same life experiences, hardships, and triumphs. Single-sex schools reinforce sex/gender as the ultimate division between children but according to supporters of single-sex education the gender division is so severe that boys and girls cannot even learn in the same classroom. How will students learn to communicate and cooperate with students of another gender? How will students learn that genders are not opposites—but in fact are overlapping identities—and how will young people grow into men and women and learn to work through difference? These questions are returned to in the closing section of this chapter.

Meanings for Race and Class

Since the mid 1990s, single-sex schools have become increasingly popular in poor minority communities; urban single-sex schools in New York, Baltimore, and Chicago are just a few examples of this trend. Supporters of single-sex education openly acknowledge that single-sex schools are useful for addressing not only gender, but also race and class concerns (Datnow & Hubbard, 2005). Highly successful single-sex schools in poor minority communities—such as the Excellence Boys Charter School of Bedford Stuyvesant and the Young Women’s Leadership School in East Harlem—

reiterate the idea that single-sex schools are the key to improving educational outcomes for underprivileged kids, but what does that mean? What are the societal implications if the majority of single-sex schools are opened in poor minority communities?

The popular usage of single-sex schools in poor minority schools is troubling in many respects. The most obvious problem with this trend is that it suggests that removing the students of another gender from the classroom can solve the academic and social problems experienced by poor racial minorities. This assumption in turn suggests that poor minority students have a much larger problem with students of another gender than do middle-class and wealthy white students. Poor minority students often face a variety of barriers to social and academic success—poor health, parents with less education, neighborhood violence—the least of which is related at all to sex or gender. For example, how will separating the sexes solve the problem of students suffering from poor health? Supporters of single-sex education believe that these schools could be especially beneficial for poor black boys who often lack male role models (Gewertz, 2007), but would it not make more sense to recruit more male role models into the coed schools so that both black girls and boys have positive male influences in their lives?

A significant limitation of the research supporting single-sex schools is that it assumes homogeneity (sameness) of gender stereotypes and norms across the entire US. The NASSPE and others supporting single-sex education frequently cite a hodgepodge of scientific studies pointing to differences in brain development, learning styles, and behavioral patterns—which are all arguably influenced by mainstream gender stereotypes. The problem with these studies being used to promulgate single-sex schools in poor minority communities is that the subjects in these studies are largely white and

middle class—racial minorities and poor children are frequently not used as subjects in these studies (Rigdon, 2008). However, social scientists suggest that different communities have different sets of gender norms and stereotypes. In *Black Sexual Politics: African Americans, Gender, and the New Racism* Patricia Hill Collins (2004) discusses the specific sexual and gender stereotypes of African Americans and the impacts these stereotypes and media images have on black culture. Collins uses intersectionality to explore the connections of gender, sexuality, and race and points to stereotypical images of black men as rapists and black women as promiscuous and immoral as evidence that this intersectionality leads to specific stereotypes different from those of other racial groups. While Collins' work explores the experiences of black adults, one can infer that non-white children face different sets of gender stereotypes and norms than mainstream (white) stereotypes and norms. As noted above, single-sex schools in racial minority communities could worsen relations between boys and girls (men and women) in these communities.

These critiques explore the implications of single-sex schools in racial minority communities, and there are also significant implications and consequences for lower-class communities. What separates successful single-sex schools from those that fail? Those that succeed are well funded, have well trained teachers, and often have high rates of parent involvement. Many single-sex schools are succeeding in poor school districts not because they separate students by gender, but because these schools receive more funding than their coeducational counterparts. As single-sex schools grow in popularity it is likely that even more grants and private donations will be allocated to these schools, setting them even farther ahead of the poorly funded public coed schools. In a few years,

even more poor urban students and their families could have the option to choose between the well-funded successful single-sex school or the poorly funded, failing coed school. If more and more poor minority students attend single-sex schools, it is likely that all of the gender issues discussed in the previous section will become increasingly severe within poor minority communities. Additionally, the use of single-sex schools in these communities could lead to an increase in acceptance of differences based on race and class, which in turn could lead to an increase in separations of persons based on race and socioeconomic class classifications. This discussion is by no means an exhaustive exploration of the consequences of single-sex schools in poor minority communities; instead this discussion stresses the importance of examining single-sex public education through more than just sex/gender perspective.

Multiculturalism and Single-Sex Education

Since the late 1960s there has been a growing movement for multicultural education in the US. Banks (1993) identifies a number of dimensions of multicultural education including content integration, prejudice reduction, and equity pedagogy. “The major goal of multicultural education is to restructure schools so that all students will acquire the knowledge, attitudes, and skills needed to function in an ethnically diverse nation and world” (Banks, 1993, pa. 46). While some conservative whites are opposed to multicultural education, believing that it is an entitlement program for minorities or that it fails to recognize the superiority of American culture, supporters of multicultural education believe that it is important for all students (including white middle-class males) to interact with diverse students and learn diverse ideas. In *Debunking the Middle-Class Myth: Why Diverse Schools are Good for All Kids* Kugler (2002) argues that schools

should not be measured on high test scores alone, but that schools should also be valued for their attention to diversity. Kugler notes that diverse student populations are beneficial to all students, specifically noting that students from different backgrounds bring different insights and experiences to the classroom, that students who interact with diverse populations learn that reality extends beyond their own experiences, and that these interactions greatly diminish stereotypes and prejudice about those who are different.

By the early 1990s clear progress had been made in multicultural education; curriculum changes were seen at all education levels (elementary schools through colleges and universities) and standard textbook content was clearly addressing more diverse viewpoints (Banks, 1993). However, in recent years there has been a growing struggle between the multicultural education movement and recent educational movements to enforce standards. Fearing loss of funding and other state enforced punishments for failing test scores, schools are now pressured to focus on standardizing content at the expense of other concerns including multiculturalism (Bohn & Sleeter, 2000). The single-sex education movement similarly challenges the progress of multicultural education. Single-sex education views difference as incompatible with education, whereas multicultural education views difference as necessary for growth and functioning within a pluralist society and world. As the US becomes increasingly diverse, proponents of multicultural education argue that it is increasingly vital that students of all ages learn to productively interact with diverse populations. With this understanding single-sex schools are a large step backwards; regardless of educational benefits, widespread single-sex education will reverse much of the progress made by

movements for multicultural education and impart in students the inability to learn, work, communicate, and cooperate through and across difference.

Conclusion: Single-Sex Education: a Modern Solution in Our Postmodern World

This thesis explores the recent US expansions of single-sex public education. Through a gender, race, and class analysis, this thesis seeks to shed light on the complicated nature of single-sex education and the complicated consequences widespread shifts toward separating public school children could have on our society. Current legal and cultural norms mark separating the sexes an acceptable—even desirable—option in public education, while separating students based on race or class is not similarly acceptable. The differing acceptances, both legal and cultural, of separating students by gender, race, and class are linked directly to US ideologies and definitions of these classifications. Social scientists believe that gender, race, and socioeconomic class differences are all socially constructed (Andersen & Collins, 2007) although supporters of single-sex education believe that sex/gender differences are biologically based (Sax, 2005). Arguably, the acceptance of single-sex public education is largely based on the widespread acceptance of assumed biological (natural) differences between the sexes/genders. Passionate arguments are made both for and against single-sex education and these debates focus largely on sex/gender issues. However, through understanding theories of intersectionality it is clear that issues of race and class difference should also be included in the single-sex education debate. The growing number of single-sex public schools in poor minority communities suggests that single-sex education is being used as a backhanded effort to address race and class concerns; while it is neither legal or socially acceptable to separate students by race and class, single-sex education is being

implemented as a side-route to avoiding these restrictions. The use of single-sex education in these communities could in turn lead to an increasing promulgation of race and class differences, essentially altering the societal meanings of these classifications.

The goal of this thesis is not to solely argue against single-sex public education, but instead the goal is to explore the complications that a gender, race, and class analysis could bring to the single-sex education debate. There are many highly successful single-sex schools and the students who attend them will likely have better future opportunities; however their success is much more complicated than simply due to separating the sexes. And while there may be individual benefits to attending single-sex schools, the societal consequences of these schools could outweigh any individual benefits. Specifically, single-sex schools could increase gender stereotyping, increase gender, race, and class-based classifications, and increase separation (discrimination) based on such classifications. The problems facing US public education are vast and diverse; similarly students come to these schools with increasingly diverse experiences and backgrounds based on gender, race, class, religious, ethnic, abledness, and other countless areas of distinction. By simply separating students by sex/gender we are assuming that they can be easily classified and we are failing to recognize the multiple classifications and oppressions facing US schoolchildren. Basically, single-sex schools are a modern answer to the postmodern problems facing American public schools. Performance gaps based on gender, race, and class differences persist, disparities in school funding are severe, and American school children are falling further behind academically compared to students in other developed countries around the world. Single-sex education is ill equipped for

solving these complex issues and could have severe consequences for both theoretical and practical interactions of diverse individuals within our society.

Steven Seidman (1997) is a prominent sociologist working in the area of queer theory; much of his work focuses on the need to queer sociology. Seidman argues that throughout its academic history sociology has been stuck in modern dualist thinking. He discusses the introduction of postmodern studies into sociology, and although postmodernism is able to break away from dualism—recognizing the numerous areas of difference—Seidman believes that this theoretical framework is also problematic because it often leads to endless fragmentation. In response to the divide between modernism and postmodernism Seidman proposes a shift to queer theory which simultaneously recognizes difference but rather than fragmenting from difference queer theory seeks to work with difference, to build coalitions across difference. Ultimately Seidman argues that our society should become a pragmatic pluralism and that this is a feasible way to better meet the diverse needs of oppressed individuals. Like queer theory, Seidman's pragmatic pluralist society is a route to discussing and embracing difference, rather than fragmenting into countless different identity groups Seidman envisions a society that can come together over their differences.

Seidman's embrace of difference and queer theory is in direct opposition to single-sex education which at its core is based on a modernist duality—namely that between male and female. Seidman is extremely critical of modernism because it separates groups into dualities, emphasizing only one main difference, whereas through queer theory Seidman recognizes infinite difference and infinite similarity. Seidman's vision of a pragmatic pluralist society seems impossible within a society that segregates

children by sex for educational purposes. Instead, Seidman envisions a place where difference is limitless and simultaneously no longer oppressive. The pragmatic pluralist society requires its subjects to work with and across difference, and this is in stark contrast to single-sex public education, which requires its subjects—students and teachers—to avoid difference. Proponents of single-sex education believe that difference is unproductive—it takes away from the learning potential—whereas for Seidman difference is infinitely productive and actually adds to the learning potential.

Seidman's work is an outright celebration of difference and diversity; he uses queer theory to emphasize the need for recognition of infinite diversity in identity. Seidman also presents the pragmatic pluralist society as a framework for bridging the fragmented gaps that difference and diversity can create. The single-sex education movement is also based on difference, but it is not at all based on diversity. This movement recognizes difference in only one form, the difference between male and female, boy and girl. This limited understanding of difference rejects notions of diversity and is deeply entrenched in modern concepts of difference. Modernism is based on dualistic understandings of difference, thus the gender identities of boys and girls are not understood on a continuum but are seen as dichotomous opposites. While the single-sex education movement outwardly celebrates the assumed inherent differences between boys and girls, it ultimately fails to recognize the sexism that many girls still face and it reiterates patriarchal norms of separate spheres for men and women. Additionally, single-sex education stifles diversity by placing children into groups based solely on their sex, and presumed gender classifications; it leaves no room for diversity within gender and diversity across gender. Single-sex schools are the ultimate rejection of pragmatic

pluralism because rather than working across difference they perpetuate the notion of difference as incompatible with, unproductive for, and distractive to learning.

Modernism and single-sex education seek to separate students based on difference whereas postmodernism and queer theory seek to bring students together across difference. As the US becomes increasingly diverse one must ask which of these perspectives is more productive, or less detrimental. Bringing students, and society, together across difference is not simple or painless, but in the long run it will arguably be more beneficial and less detrimental to personal and societal relations. Sex and gender separations do not end after high school graduation; men and women work in the same offices, live in the same communities, and frequently form families together. America's young people need to learn how to work, communicate, and relate to persons of all sexes and genders.

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