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'Dangerous presumptions': how single-sex schooling reifies false notions of sex, gender, and sexuality

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Due to the recent changes in federal regulations about gender equity in education in the USA, some policy makers have resurrected single-sex public education. Because single-sex schooling ignores the complexity of sex, gender, and sexuality, it sets up a 'separate but equal' system that is anything but. Discounting the ways in which gender is negotiated, constructed, and performed, and the variability of anatomical sex, current arguments for single-sex schooling reify the false binaries of sex and gender, rely on assumptions of heteronormativity and, in turn, negate the existence of multiple sexes, genders, and sexual orientations.

Keywords: single-sex schooling; heteronormativity; intersex; Title IX

Introduction

Due to the recent watering down of federal regulations about gender equity in schools in the USA, known as Title IX, some US policy makers have resurrected single-sex public schooling. The number of single-sex public schools in the USA went from two to 49 between 1995 and 2008 and the number of US public schools offering single-sex classes went from 12 to 518 between 2002 and 2009 (Hahn 2009, A1). In addition, the world-wide representation at the European Association of Single-Sex Education's (EASSE) recent conference, which included Africa, Asia, and Australia, indicates an increasing global interest in single-sex schooling. On the other hand, in some parts of the world that have had strong traditions of state-sponsored single-sex education, the number of single-sex schools has decreased over time. For example, in the UK, the number of single-sex state schools has fallen from 2500 to 400 over the time span of 40 years (Asthana 2006). The formation of EASSE in 2005, however, suggests this trend may reverse itself. Using alluring arguments about differences in learning, proponents of single-sex education hold out promises of an equal but separate educational system. This claim of a 'separate but equal' system rests on the unfounded assumption that humans come in two varieties – male and female – and ignores historical and current patriarchal systems, both of which call into question the plausibility of 'separate but equal' single-sex schooling.

Arguments that single-sex schooling accommodates sex differences appeals to the popularly accepted notion that males and females are fundamentally different instead of interrogating whether these differences are biologically, socially, or individually

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constructed, or if they even exist in the first place. In 1975, Maccoby and Jacklin set out to systematically examine the cultural beliefs about differences between males and females. Outside of the ones where they found inconclusive evidence and the ones where they found evidence supporting that males and females are not different, they listed four beliefs they found some evidence for: 'that girls have greater verbal ability than boys', 'that boys excel in visual-spatial ability', 'that boys excel in mathematical ability', and 'that males are more aggressive' (1975, 352–4). In all but one of these, they found that these differences emerged in adolescence, which opens up the possibility that these differences may arise out of children monitoring their own actions to conform to gender norms. Aggression, the one that emerged at the beginning of social play, around two years old, was found to decline in later years, and was found to be situational. These findings led Maccoby and Jacklin to conclude:

> Stereotypes are … powerful things … if a generalization about a group of people is believed, whenever a member of that group behaves in the expected way the observer notes it and his belief is confirmed and strengthened; when a member of the group behaves in a way that is not consistent with the observer's expectations, the instance is likely to pass unnoticed, and the observer's generalized belief is protected from disconfirmation. We believe that this well-documented process occurs continually in relation to the expected and perceived behavior of males and females, and results in the perpetuation of myths that would otherwise die out under the impact of negative evidence. (1975, 355)

I would also offer up the possibility that when someone observes someone acting in an unexpected way, that person is labelled as 'an exception to the rule', thus operating to reinforce beliefs and to reify the bifurcation of male and female. Maccoby and Jacklin (1975) also point out several difficulties in evaluating the data. For example, parental self-report or retrospective self-report can be a reflection of gender norms: 'if a parent is asked, "How often does your daughter cry?", the parent may answer 'Not very often, meaning "Not very often *for a girl*"'. The same frequency of behaviour might have been rated 'quite often' for a son, from whom the behaviour was less expected' (1975, 356). Because later research that found no sex differences in several of the categories (Connell 2002) where Maccoby and Jacklin (1975) did find evidence, these concerns may well have been valid and/or these differences could have been snapshots in time that greater social gender equality has ameliorated. Connell points to meta-analyses of sex difference studies to conclude that '*women and men are psychologically very similar*, as groups. We should long ago have been calling this field "sex similarity" research' (2002, 42).

The act of examining differences between males and females itself assumes there is a difference – and presumes there are only two genders and two sexes. As Thurer points out:

> Try to recall a survey or psychological instrument that doesn't begin: 'M or F?' It is nearly impossible because a request to indicate one's gender is a conventional feature of almost all standardized forms. We seem to be unable to collect information without automatically requiring a rupture between males and females. So it is hardly surprising that when we tabulate data, we tend to find an absolute difference between genders, not a relative one. It's preordained. Without thinking about it, we organize our knowledge around the sex/gender binary. (2005, 14)

Indeed, when I saw *The Brandon Teena Story*, a movie about an anatomical female who presents as male, I was asked to take a survey about the film which began with

the 'M or F' question with no alternative choices. When all you have is a hammer, or an understanding of humans as either male or female, everything you see is a nail. Thurer describes the effect of examining differences instead of similarities:

> Most researchers are looking for difference (not sameness) and are therefore apt to find it and exaggerate its importance – like looking for distinguishing characteristics in identical twins, discovering a mole or two, and concluding that the twins are not identical … We too readily infer … that [men and women] are essentially different, not fundamentally the same. Never mind the fact that, genetically speaking, every human being on the planet is 99.9% identical. (2005, 9)

Under these assumptions, people who act outside of their gender norms are portrayed as a 'problem'.

Many arguments against single-sex schools have been made, such as assertions by the American Civil Liberties Union (ACLU) that single-sex education amounts to discrimination (Mrozowski 2007) and by scientists who point to too many exceptions to the 'rules' about sex differences in learning (Weil 2008), but few question the existence of only two genders, and very few question only two anatomical sexes, to begin with. Even Barnett and Rivers, who debunk assumptions about gender, state 'Of course there are differences between the sexes – how could it be otherwise?' (2004, 13). A deeper examination of gender and biological sex, however, reveals that the assumption that a 'natural order' follows from a biologically determined dimorphic sex that matches gender and then dictates behaviour, including sexual behaviour, breaks down at every point in this chain of thinking (Jagose 1996; Morris 1998; Sedgwick 1990).

In Women's Studies, scholars make a distinction between the sex people are born with and the way people perform their sex, or their gender. Gender, then, can be seen as a 'language, a system of meanings and symbols, along with the rules, privileges, and punishments pertaining to their use – for power and sexuality' (Wilchins 2000, 35). Some who describe gender as socially constructed believe that anatomical sex is '"the biological raw material" [Rubin 1975] that culture transforms into gender' (Corber and Valocchi 2003, 8) and assume that people's anatomical sex matches their gender. Butler, however, argues that 'sex itself is a gendered category' (1990, 7) and that 'sex is not gender's biological foundation, but one of its most powerful effects. The category of sex works to naturalize the binary organization of gender by functioning as the seemingly neutral referent of gendered identity' (Corber and Valocchi 2003, 8). In other words, 'we don't fit the words to the bodies; instead, it is the bodies that must fit the words' (Wilchins 2000, 76). Morris describes gender as 'slippery' (2005, 8), but anatomical sex is slippery as well.

Paetcher, who argues that learning gender can be seen as becoming participants in 'localized communities of practice' (Lave and Wenger 1991), points out that 'how we enact masculinities and femininities changes as we move between groups, between places and spaces, and through time' (Paechter 2003, 541) and Nanda's work examining gender variance around the world attests to the 'cultural construction' (2000, 9) of gender. Anderson (2002) found that elementary children negotiate gender through naming practices, verbal interactions, intertextual references such as metaphors, allusions, and personification, and physical presentation. She uses the metaphor of casting a fishing line to describe how children try out and try on different conceptions of gender. In addition, children not only 'become self-regulating subjects, or subjects who police their own behavior so they will appear "normal"' (Corber and Valocchi

2003, 11), but young children are also 'active and knowing agents in this process [of gender construction], engaging in the policing of gender performances of other children (and adults), within rigid boundaries of what is widely considered "appropriate" masculine and feminine behaviours' (Robinson 2005, 19). Connell calls this 'learning gender competence' (2002, 81). What is considered 'appropriate' varies based on a number of factors:

> It is crucial to point out that the concept of gender 'performance' is always one enacted within strictly defined cultural boundaries; what counts as a performance of masculinity or femininity is rigidly defined and policed by the sociocultural context of the particular time. Getting one's gender performance right is critical, as individuals run the risk of being ostracized or bullied if they do not conform to what is generally upheld as appropriate boy or girl behaviours. What constitutes the knowledge of what it means to be a boy or a girl is based on the multiple discourses of masculinity and femininity that are culturally and historically available, which intersect with other sites of identity such as 'race', ethnicity, class, sexuality, and so on. (Robinson 2005, 20)

Because people 'mistake the acts for the essence' (Kirsch 2000, 87), they assume gender is an inherent quality instead of negotiated, enacted, and actively constructed. Epstein and Johnson recognise that the social construction of gender is not unidirectional: 'children are both acted upon and are active in making their own meanings', but also point out that 'These processes are charged with emotion, as can be seen from the vehemence with which young children act out gendered and sexualized roles … and stigmatize behavior which runs counter to those expected' (1994, 205). West and Zimmerman (1991) assert that not only do we 'do gender' but gender is also done to us.

The Director of the National Association for Single-Sex Public Education (NASSPE), however, embraces an essentialist assumption of innate differences between males and females: 'Educators in single-sex classes can teach in ways that respect fundamental differences between boys and girls' (Sax, quoted in Farrell 2007, A1). Other proponents have also used this essentialist assumption to support single-sex schooling: '[single-sex schooling] prepare[s] students for the roles they will assume as adults' (Salamone 2003, 120). Ironically, stating that children have to learn how to be men and women implies that sex differences are not innate after all. As more and more evidence reveals, limiting ourselves to two genders, and even to two sexes, is not innate either.

Single-sex schooling and intersex, transgender, and gender-bending students

In the past, when doctors could not readily determine the biological sex of a baby based on its genitalia, steps were taken, sometimes without informing the parents, to surgically assign a definitive sex. Because of the secretive aura surrounding this act, it is impossible to know historically the percentage of the population born as hermaphrodites, but today, doctors recording these instances provide a more accurate picture of what percentage of the population is born as intersex, estimated to be about 1.7% (Fausto-Sterling 2000, 51). This includes not only those whose external genitalia do not present as definitively male or female but also those whose internal organs do not 'match' their external genitalia and those whose chromosomes are neither XX nor XY as well as a number of other situations. Instead of viewing sex as either/or, the range of variation of human sexes is more accurately depicted as a continuum:

> Nature doesn't decide where the category of 'male' ends and the category of 'intersex' begins, or where the category of 'intersex' ends and the category of 'female' begins. Humans decide. Humans (today, typically doctors) decide how small a penis has to be, or how unusual a combination of parts has to be, before it counts as intersex. Humans decide whether a person born with XXY chromosomes or XY chromosomes and androgen insensitivity will count as intersex. (Intersex Society of North America 2006, 1)

Because what counts as a standard male or female is subjective, there are no hard and fast numbers regarding the number of intersex individuals, but doctors have difficulty assigning sex in about one in 1500 births, a number Dreger (1998) bases on Fausto-Sterling's work, and 'about one in a hundred births exhibit some anomaly in sex differentiation' (Case 2003, 31). This is significant not only because of the proportion of the population this affects, but also because:

> To clearly see discursive power at work, we need bodies at society's margins. Margins are margins because that's where the discourse begins to fray, where whatever paradigm we're in starts to lose its explanatory power and all those inconvenient exceptions begin to cause problems. (Wilchins 2000, 71)

Because of misperceptions regarding the number of humans who do not conform to society's sexed expectations, intersex individuals are seen as 'outliers', 'mistakes', or 'exceptions to the rule', or more often than not, not seen at all.

In addition, a growing number of transgender people live as 'genderqueer', occupying a space that transcends society's binary notions of gender (Nestle, Howell, and Wilchins 2002). Connell argues that 'patriarchal gender arrangements are so difficult to abolish' (2002, 55) because they are embedded in our language; however, youth, including youth who would not fall under the category of transgender, are using language to define their own genders: 'In the middle of fem and butch', 'A tom boy with a princess stuck in side of me', 'andro', 'fem-androgynous', 'in-between', 'boi', 'birl' (Driver 2007, pp. 41–2). Intersex, transgender, and gender-bending students challenge the assumption of dimorphic anatomical sex and of two genders. Hird (2003) argues that a stable gender identity that adheres to the Western binary system of sex and gender is not a prerequisite for 'mature' relationships, and that accepting one's self and desires may even strengthen them.

As Corber and Valocchi point out, 'The institutional regulation of [transgender and intersex identities] suggests that on some level the dominant society recognizes that there is no natural or biological relationship between sex, gender, and sexuality and that it must vigorously enforce the belief that there is' (2003, 9). This enforcement takes place under the guise of medicine: 'Since the early 1960s, nearly every major city in the United States has had a hospital with a standing team of medical experts who intervene in these cases – through drastic surgical means – a male or female status to intersex infants' (Case 2003, 31). Case also points out that 'The fact that this system for preserving the boundaries of the categories male and female has existed for so long without drawing criticism or scrutiny from any quarter indicates the extreme discomfort that sexual ambiguity excites in our culture' (2003, 31). In other words, 'Accepting gender ambiguity as a natural option would require that physicians also acknowledge that genital ambiguity is "corrected" not because it is threatening to the infant's life but because it is threatening to the infant's culture' (Kessler, quoted by Case 2003, 43). Although both co-educational and single-sex schools tend to fail to recognise the complexities of biological sex and of gender,

those who promote single-sex schooling render intersex, transgender, and gender-bending students invisible by institutionalising this blindness.

Single-sex schooling and same-sex affection

Assuming that binary biological sex is 'natural' also lends support to the heteronormativity that pervades our school systems and culture. From the perspective of queer theory, identity is understood not as unitary, fixed and innate, but instead as multiple, fluid and socially constructed, thus 'the singular notion of identity is a misnomer' (Butler 1990, 4). In this sense, Talburt sees queer theory as 'consonant with post-structural, post-modern, and feminist theories that challenge binary constructions of identities' (2000, 3). Queer theorists, postmodernists, and feminist poststructuralists all call into question the depiction of gender genetically unfolding according to a presumed 'natural' division of biological sex, instead acknowledging that people perform gender in a way that shapes and is shaped by people, or, as Morris put it, 'We make ourselves up as we go along' (2005, 9).

Just as homophobia has been used to police gender roles, the notion of two sexes reinforces homophobia. For example, assumptions about the essentialism of gender have recently been used to justify discrimination against gay couples marrying by arguing that all children need a father and a mother. Robinson delineates ways in which young children are heterosexualised – through heterosexual narratives in literature, through discouraging displays of same-sex affection, through the media, through gendering play – as 'experiences of retributions for … transgressions become powerful lessons in which children learn what is acceptable and what is intolerable in terms of their gender performances' (2005, 27). 'It is the presumption of heterosexuality that ascribes bodies as gendered' (Robinson 2005, 21), thus gendering children is, in effect, heterosexualising them as well.

Embedded in many of the arguments for single-sex schooling are statements that expose underlying assumptions of normative heterosexuality, despite that sometimes 'All-boys schools … frequently run into resistance from parents and boys concerned that it could encourage homosexual behavior' (Vazni 2009, A1):

- Teachers say it's … a relief to have a break from the male–female sexual sparks of adolescence while they're trying to discuss Athens and Sparta or Victorian novels. (Meehan quoted in Jones 2007, 6)
- Away from the distraction of trying to attract the other sex, girls are free to define themselves as other than objects of male sexual fantasy. (Meehan 2007, 51)
- 'For the guys, they don't have the pressure of having to compete for the girls' attention as much', said Bobby Gibson, a science teacher at Fox. 'They can just be boys a little longer.' (Farrell 2007, A1)
- Advocates say single-gender classes remove distractions from the opposite sex. (Mrozowski 2007, 1)
- Boys and girls distract each other. Whether this distraction takes the form of dressing to impress the other gender … or sexual harassment, there is no question that distractions exist. (Streitmatter 1999, 36)
- A lot of it is showing off. It's boys with raging hormones who want the girls to pay attention to them. (Crocker-Roberge, quoted in Wertheimer 2009, S1)

More than one advocate for single-sex schooling quotes Coleman's 1961 statement that 'Boys and girls together distract each other. Whether this distraction takes the form of dressing to impress the other gender, competition for teacher time and attention, or sexual harassment, there is no question that distractions exist' (quoted in Herr and Arms 2002, 75).

Parents also buy into these arguments. Based on research by Heather (2002), parents chose single-sex schooling for their daughters largely out of fear: fear of discrimination, fear of harassment, and fear of pregnancy. Parents believed these 'distractions of male behavior' would lead to a 'loss of confidence and decline in grades' (2002, 310). They based these fears on news accounts, their own youth, and stories from their daughters. Heather reports that parents saw these presumed male behaviors, and presumed female responses, as 'natural' and 'accept[ed] the naturalness of sex difference' (2002, 320). Although parents also cited wanting a quality educational experience for their daughters:

> The heart of the problem, as parents described it to me, was that adolescent boys and girls had a negative impact on each other's school performance. Girls in particular were easily distracted by sexual attraction and by the peer hierarchy that was headed by boys … Coeducational schools allowed boys to be 'disrespectful' to girls and distract them from their work, and they failed to assist the girls to get good marks or value education. The solution was to remove the girls from the boys. (2002, 314)

Heather coins the term 'gender-proofing' to describe this phenomenon detailed below:

> Thus the concerns parents had about discrimination, distraction, and harassment, the interpretation that they placed on their own experiences, their understanding of gender as natural, and of the prerequisites for safety and success, led them to believe that although boys could not be changed very much, their more compliant daughters could, and that through cloistering and building character, a single-sex school would help them to accomplish that change, becoming safe without losing femininity. (2002, 316)

Separating girls from boys based on the assumption that only girls distract boys and vice versa ignores the possibility of boys distracting boys and girls distracting girls – sexually and otherwise. These 'dangerous presumptions' (Galleget of the ACLU, quoted in Salamone 2003, 16) can blind teachers, researchers, and policy makers to the existence of gay and lesbian students. Although co-educational schools can also be blind to queer students, setting up a school situation based on these assumptions can institutionalise this invisibility.

Single-sex schooling and learning

Based on the outmoded notion of two 'opposite' sexes, some advocates for single-sex schooling also make 'dangerous presumptions' about how people learn:

- They get to the advanced work by using girls' natural strength – communication. (Meehan, quoted in Jones 2007, 6)
- [Sax] said the hard-wiring of boys' brains lead them to be less comfortable talking about their emotions. (Farrell 2007, A1)
- 'Kids learn differently', [Sax] said, adding that giving parents the chance to put their children into single-sex environments is 'really a matter of social justice'. (Farrell 2007, A1)

- Educators agree that boys and girls learn differently. (Spielhagen 2008, back cover)

Underlying the research cited by proponents of single-sex education that 'shows' males and females learn differently, have competencies in different areas, or develop at different rates, is the assumption that these differences stem from a 'natural' division between male and female which fails to take into account environmental factors and ignores their impact on brain development by using words like 'hard-wired' (Gurian 2006) and 'innate' (Sax 2005). Gurian (2006), who bases his argument that males and females learn differently on brain imaging, does not acknowledge that these snapshots of brain development do not tell the whole story. Recent developments in brain research attest to the plasticity of the brain (Doidge 2007). For example, enculturating males into the world of sports may contribute to greater spatial ability and a more developed area of the brain devoted to spatial ability. If females were raised with the same set of cultural expectations, their brains might develop in the same way.

Despite these arguments being used widely as a selling point for single-sex education, not all proponents of single-sex schooling agree that males and females learn differently. Even Salamone, who helped revise US federal regulations that allowed single-sex public schools to flourish in the USA, points out:

> The fact that increased intervention strategies on the part of schools, along with changing attitudes in society, have narrowed the gap favoring boys in math and science indicate that ability in these areas is changeable and not carved in biological stone. (2003, 106)

Currently Salamone regrets that her work has led to an increase in schools based on this type of reasoning: 'As one of the people who let the horse out of the barn, I'm now feeling like I really need to watch that horse … Every time I hear of school officials selling single-sex programs to parents based on brain research, my heart sinks' (Salamone, quoted in Weil 2008, 1). Despite making statements like 'the way girls learn best' (Meehan 2007, 277), Meehan, another advocate for single-sex schooling, also discounts the 'scientific' research attesting to the differences between males and females: 'The question of innate differences is impossible to determine scientifically since boys and girls grow up in a society that treats them differently' (2007, 224). Other researchers, such as Rivers and Barnett (2006), have gone into more detail debunking many of the studies that claim there are biological and cognitive differences in males and females, pointing out small sample sizes or other research studies that contradict the findings that Sax and his proponents tout.

Single-sex schooling and interests

Ironically, Sax makes an assertion that agrees with Rivers and Barnett, and in doing so contradicts other statements he has made, stating 'The big differences between girls and boys are not in ability at all; they are in motivation' (Mrozowski 2007, 5A). But even this argument that males and females are less or more likely to show an interest in various areas ignores the prejudice and social pressures that steer males toward 'hard sciences' and females toward 'nurturing' professions. It also ignores the impact of physical, social, cultural, and familial environments. Tavris (1992) asserts that females are not nurturing because they have the biological potential to be mothers, but rather due to their oppression by men since those who are oppressed learn to be

sensitive to others' needs in order to survive. On the other hand, oppressors have no survival need to pay attention to the needs of anyone else but themselves.

The argument that males and females have different interests also discounts students who are interested in areas not traditionally associated with members of their sex. Some of the news articles on single-sex schooling reveal that these presumptions do influence how teachers teach in single-sex settings. Farrell (2007) quotes one teacher who stated she could teach stories with female heroines to her female students, but this fails to recognise that it may be even more important for males to read stories with female heroines. One middle-school student in a single-sex class wrote that she 'think[s] the discussions are more centered on female topics that don't necessarily interest her. She doesn't want to talk about lip gloss' (Scott, quoted in Wertheimer 2009, S1). Assuming that one gender prefers certain activities excludes and precludes students from exploring all of their interests and risks presenting students with a more stereotypical view of gender. As Sadker points out, 'Kids are more than their gender' (quoted in Farrell 2007, A1). Making biological sex a point of division, though, leads people to categorise each other in that way. By assuming biological sex is binary and that people's interests and proclivities are rooted in this presumed dualism, single-sex education can exacerbate societal differences.

Although Sax (2005) recognises that not all males like trucks and not all females like dolls, an examination of his arguments for single-sex schooling reveal the dangers that lie in tying children's interests to their gender identity. Despite his claim that 'Every statement I make about sex differences will be supported by good science published in peer-reviewed journals' (2005, 7), he includes unsupported statistics that are not even foot- or end-noted such as 'one of those 10 percent of boys who are highly risk-averse' (2005, 156). He attacks books based on 'authors' personal beliefs or political agendas' (2005, 7), yet his own description of non-traditional males and females reveals a bias of his own. He suggests that a male's 'anomalous' behaviour is caused by mothers giving in to their sons' needs too much, even citing an example of a mother who allowed her son to breastfeed too long, according to Sax. On the other hand, he depicts females who are 'anomalous' as more well-adjusted without acknowledging that society values 'male' characteristics over 'female' ones. He even goes so far as suggesting 'dare training' for females to make them more like males, but does not suggest any analogous training for males. Instead, he pathologises males who 'behave like girls' and praises females who 'behave like boys'. Because our society still privileges traditionally 'male' behaviours over 'female' behaviours, single-sex schooling sets out on a path that is separate and already unequal.

Concluding thoughts

A closer examination of studies on single-sex education reveals that it is impossible to separate out other factors that may contribute to student success. Salamone concedes 'anyone familiar with education research methods would agree that all the conditions for a valid, reliable, and useful comparative study simply do not exist here' (2003, 9) because the populations of single-sex schools are voluntary, the schools are academically rigorous, and the schools have selection criteria. In addition, she points out:

> There is no definitive way to tell whether any differences in outcomes are the direct result of gender organization or merely the effect of background differences between

> student populations. Are the students who choose to attend these schools simply more motivated or academically inclined? Do their families hold higher aspirations for their daughters' success? Even if these factors could be controlled statistically, there is no way to account for a host of institutional features that inevitably affect learning. Schools differ from each other in subtle and not so subtle ways that are not quantifiable, from their curriculum to the instructional materials and approaches used, to their educational philosophy, academic expectations, teacher experience, and overall climate. (Salamone 2003, 9)

In describing the success of one single-sex school, the principal inadvertently lets it slip that the success may not be due to the school being single-sex: 'Since the college prep program and uniforms were introduced, discipline has improved and attendance skyrocketed' (Mrozowski 2007, 5A). By their very nature, statistics that tout the success of single-sex schools lack reliability and validity. Perhaps any success of a single-sex school has more to do with changing traditional school structures that impede learning or the increase in interest due to using a novel approach.

The diversity within genders and of genders and the diversity of anatomical sexes renders assumptions behind single-sex education overly simplistic and limiting. Although humans negotiate, construct, and perform their own gender, or Butler might say that gender performs people (Thurer 2005, 147), the reality is that people who are labelled males and people who are labelled females are socialised to act differently and to see each other as different. Sadker points out that a danger of single-sex classes for males is that it could lead to engendering misogynistic attitudes (cited in Farrell 2007). One way to overcome sexism and homophobia is through interaction among all genders in order to disprove the stereotypes. Streitmatter, though, points out that:

> The concept of equity as the basis for remedy of gender inequities in schools suggests that what is fair is not necessarily equal. Simply removing barriers of access to females does not address the issues of inequitable treatment once they are admitted, nor does it constitute a means of restructuring the existing culture of schools and classrooms, which would be required in order to make schools truly inclusive. Public coeducational schools are Euro-male centric cultures, and until this is no longer the case, females as a group represent a subculture and continue to be marginalized. (1999, 121)

It is true that co-education has not erased the sexism in our public/state-owned schools but that does not mean single-sex education is the answer. As Campbell and Sanders point out, 'The obvious difficulty with sex segregation as a solution to [sexual harassment] is that the *real* problems are simply avoided' (2002, 40) and that

> by removing the girls rather than dealing with the issues of classroom misbehavior and disrespect that are creating the problem in the first place, we are assuming a stereotyped view of girls as gentle, weak creatures who cannot handle the rough environment of the real world. (2002, 40)

Heather's study lends credence to single-sex schooling sending this message as she found that parents who chose single-sex schooling for their daughters 'believed [their daughters] to be more in need of protection than boys' (2002, 319). Co-education needs to do the hard work of making schools places where people of all genders can achieve their highest potential. Campbell and Sanders (2002) express concern that public single-sex schools will draw the voices of parents concerned about education for females away from co-educational public schools, essentially letting co-educational public schools off the hook for doing this hard work.

Single-sex schooling reifies the false binaries of sex and gender, relies on assumptions of heteronormativity and, in turn, negates the existence of multiple sexes, genders, and sexual orientations. In a world of ever-increasing visibility of gender diversity and exploration of the complexity of human sex and sexuality, single-sex schooling is an anachronism – one that has the potential to take us back to a time when females and males who behaved outside gender norms were perceived as 'problems' instead of as people.

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