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The Psychology of Single-Sex Classrooms

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My dream high school was Bronx Science. Both of my sisters went to Bronx Science, so in the
great tradition of younger siblings, I wanted to go too. In the 8th grade, I took the Specialized
High School Admission Test in a room filled with hundreds of eager 13 and 14 year olds, hoping
that in a few months my dream school would become my actual school.

One day in early spring, I heard the lid of the mailbox slam shut and I ran to the front door to
retrieve the letter I had been waiting weeks to get. I held the envelope in my hands willing the
letter inside to say what I wanted to hear. The first line read “We regret to inform you…” and
went on to say that there had been rigorous competition that year to earn a spot in one of New
York’s specialized high schools. My eyes glazed over as I continued to read, but not comprehend
the fact that I was denied from my top choice of high school.

As an alternative to Bronx Science, my parents discussed sending me to Lehman High School,
the local public high school in my neighborhood. The three of us sat down in our living room as
they calmly told me that I would be attending Lehman in the fall. I felt the tears begin to collect
in my eyes at the thought of being thrust into a school where kids engaged in physical violence
for sport and administrators installed metal detectors for “the safety of their students.” The only
thing I could manage to say in response to their news was “No, I can’t go there,” before I started
to cry. The tears ran down my face in a fast, salty stream while my parents tried to console me.

But in my panic, I remembered that when I took the SHSAT, I had also taken the Test for
Admission into Catholic High Schools. I proposed that instead of going to Lehman, that I go to
Preston High School, one of the three Catholic high schools to which I was admitted. Preston had
a good reputation, strong academic standing and molded the minds of young people who
attended some of the best colleges in the country. The only drawback was that it was an all-girls
school where I’d have to wear a uniform for four straight years, a small sacrifice to pay for a
good education and my safety. So, in September 2007, I started my high school career as a
Freshman at Jennifer Lopez’s alma matter in the Throggs Neck section of the Bronx. There was
a pep rally on the first day of school where the Freshmen girls learned that they were “women of
dignity, honor and respect,” a message that was hammered into our heads for the next four years.

In the middle of my Sophomore year at Preston, I met Anika Wright who had just transferred to
my school from the Montfort Academy. The Montfort Academy is a coeducational high school
in Mount Vernon, New York, a suburban city in Westchester County. The school opened as an
all-boys school in 2002 and was originally located in Katonah, New York but moved due to
increased enrollment. In 2007, it opened its doors to girls who enrolled in a separate all-girls
program within the same facility. Wright was one of 13 young women admitted to Montfort in
its inaugural year as a “coed” school. “I went to Montfort Academy for all of Freshman year and
one week of Sophomore year,” she said. “It sucked. To this day I’d never tell anyone to send
their kids there.”

Wright told me about the experiences she had at Montfort. “There were two principals, one for
the boys and one for the girls,” she said. “Our principal was an evil lady. She was the one who
enforced all these rules.” During the day, Wright said that the teachers and other administration would measure the length of the girls’ skirts. “We weren’t really allowed to have nail polish either.” The teachers policed how girls acted, telling them what was “ladylike” and not ladylike. “The boys were conscious about how they acted around us.”

Before I heard Wright’s story, I was unaware that single-sex classrooms were making their way into coeducational and public schools. The thought of separating male and female students in a public school was a foreign concept. Yet in the 2011-2012 academic year, 699 public schools across the United States offered single-sex educational opportunities to its students. Many of them claimed to be voluntary programs that parents could choose to enroll their children in or not. In 2016, there are thousands of public schools in the United States that are either fully single-gender schools or schools that offer single-sex classrooms in different subjects and grade levels.

Single-sex classrooms emerged due to the belief that males and females perform differently in specific subjects. Traditionally, boys excelled in math and science, while girls were strong in English, art and other “creative” subjects. So, schools that subscribe to the belief that girls and boys have fundamentally different learning styles and skills teach students accordingly. Advocates of single-sex classrooms say that its beneficial for several reasons, ranging from the sexes succeeding in classrooms with varying temperatures to broadening educational prospects for boys and girls. Others argue that boys need an active learning environment that allows them to stand up and move around while absorbing the information, while girls need a nurturing environment that fosters communication and cooperative learning.

Westside Elementary School in Florida is a coeducational school that experimented with voluntary single-sex classrooms from Kindergarten through 5th Grade. The students at Westside Elementary receive markedly different treatment within their classroom settings. In a report by the ACLU, the organization wrote “Girls are encouraged to work quietly and discuss their feelings and personal problems. They are expected to be cooperative and noncompetitive. Boys are encouraged to move around and compete and are not encouraged to discuss their feelings. These sex stereotypes limit opportunities for boys and girls alike.”

Teachers and administrators who believe in the educational benefits of single-sex schooling cite one man as their inspiration: Dr. Leonard Sax. Sax’s teachings are the foundation for gender separating in certain public schools. In 2002, the psychologist and family physician founded the National Association for Single Sex Public Education based on his findings that males and females are fundamentally different in several key areas and that they need specialized teaching methods to cater to their differences. In 2005, Sax presented the findings in his first book, “Why Gender Matters: What Parents and Teachers Need to Know about the Emerging Science of Sex Differences.” Sax wrote that males and females differ in several key areas including sight, hearing and mathematics.

Single-gender classroom supporters and detractors have debated the validity of his beliefs and writings about the innate differences between males and females. On his website, Sax wrote:
“Boys today are more likely to be disengaged from the real world compared to boys 30 years ago. But American girls today are far more likely to be anxious and depressed compared with American girls 30 years ago. Which is worse: being a disengaged boy who sits in his bedroom happily playing video games 20 hours a week, or being an anxious girl who secretly cuts herself with razor blades?”

Diane Halpern wrote “The Pseudoscience of Single-Sex Schools” along with a group of psychologists and researchers including Lise Eliot, Rebecca S. Bigler, Richard A. Fabes, Laura D. Hanish, Janet Hyde, Lynn S. Liben and Carol Lynn Martin work to discredit the belief that there are benefits to single-sex classrooms in public schools. “The idea that boys’ brains learn one way, girls learn the other way – there’s absolutely nothing in neuroscience that says the underlying neurobiology is different,” said Halpern. “The idea is that girls work better when they’re cooperative and boys work better when they’re competitive – and actually there’s no support for that either. Everyone needs to learn how to cooperate and compete.”

“There’s been a huge boost to segregate boys and girls based on their brains and other physical characteristics, and that’s just clear junk,” said Halpern. “There are some excellent single-sex schools, but they’re excellent not because they’re single-sex, but because they’re good schools.” Halpern’s article outlines that there are little to no advantages to single-sex schooling both academically and mentally.

One section titled “Negative Impacts of Highlighting Gender” lists the negative repercussions of having single-sex classrooms in public institutions. One of the consequences is that children develop what is known as “intergroup biases” when they are separated by gender, or even more arbitrarily by eye color or what clothes they’re wearing. Intergroup bias results in group members favoring the members of their own group while showing prejudice towards other groups. “The problem is, every time we segregate people, black/white, female/male, young/old, we’re saying that this is an important dimension for how we think about people and we find stereotyping very, very quickly,” Halpern said.

The researchers wrote that the fight to end segregation in America’s public schools is “parallel to the fight against racism.” In 1906, sociologist William Sumner coined the concept of intergroup bias in his book “Folkways: A Study of the Sociological Importance of Usages, Manners, Customs, Mores, and Morals.” Sumner’s original study linked group biases to differing ethnic groups, which Sumner concluded leads to ethnocentrism within those groups. In “Folkways” Sumner said, “Ethnocentrism is the technical name for this view of things in which one's own group is the center of everything, and all others are scaled and rated with reference to it.”

My first couple years of high school were fine and enjoyable to a certain degree, despite the lack of male interaction. Whenever I told friends who went to coed high schools that I went to Preston, the first questions they usually asked was, “What about the boys? Isn’t it weird to go to school with just girls?” I didn’t know how to properly answer that question because the single-sex, structured environment was the norm with which I was comfortable. Every morning I would put on my grey plaid skirt with maroon and blue stripes running through it, paired with a white
collared shirt, maroon button-up cardigan, tights and school-approved black shoes. I didn’t have to think about what I would wear that day or worry about impressing my crush with my keen sense of style. I could wear my hair in a messy bun atop my head without receiving weird looks or snarky comments. If a few pimples cropped up on my pubescent skin, I didn’t feel compelled to cover them up with makeup.

But Junior year of high school came along and the routine of seeing a building full of the same girls every day was getting stale. The only males at our schools were some teachers, a few administrators and the maintenance staff. Male visitors who picked girls up from school had to wait outside the black iron gates. They were regularly interrogated by teachers and the dean of students with questions like, “how old are you,” “what school do you go to,” and “how do you know her.” As I watched boys gather outside waiting for their friends and girlfriends to get out of class, I too wondered where they had the opportunity to meet each other.

During the spring of Junior year, students take the dreaded SAT as a measure of their capacity to memorize complicated words and math formulas. I walked into the huge gym of the Riverdale Country Day School with two of my girlfriends, all of us clutching our pencil cases and water bottles to our chests. Rows of desks filled the entire room, and on each desk was a packet of papers awaiting each student. I glanced around the room to assess the unfamiliar surroundings and was hyperaware that I would be taking the test in a room mixed with male and female students. It was an odd feeling. After three years of learning in a single-sex environment, I had only made female friends. The one close male friend I had, I met in elementary school. The coed SAT setting was foreign and uncomfortable.

Allie Baum, an advocacy and political strategist for the ACLU wrote about her experience as a visiting student at Barnard College, a historical women’s college in New York. When one student was asked why she chose to transfer to Barnard from her other college, the young woman said, “Well, I went to an all-girls elementary school and an all-girls middle school and an all-girls high school, and when I got to my co-ed college, I didn’t know how to function around the boys, so I decided to transfer to Barnard.” Halpern said that this lack of interaction with the other sex isn’t reflective of the structure of society, where men and women live, work and interact daily.

Some of the girls that I knew went to all girls’ schools had positive experiences during their four years. I met Alyson Joa, an all-girls school veteran, through my cousin. “It was me who chose to go to Aquinas, actually,” she said. “I visited Monsignor Scanlan and I went to Spellman and for me, they were just regular schools. There was something special about Aquinas.”

When Joa graduated from Aquinas High School, she attended St. John’s University which is a coed college in New York City. “I don’t think I paid attention much to the fact that there were boys in the classroom, because I think I had already been used to just being focused on my classes, so I already had that kind of mindset.”

I remembered the conversation I had with Wright about her experience in separated classrooms and noted how it was much different than Joa’s time at Aquinas. “At my school, a boy I knew asked what math class I was in,” said Wright. “When I told him I was in the honors class he said,
‘I didn’t know you were good at math.’” She was baffled at the boy’s comment. “Why would you say that? You don’t know what I can do until you get to know me.” The attitude of people assuming that girls and women “are not good at” certain subjects is the basis for groups and individuals like the ACLU, Diane Halpern and other advocates to speak out against single-sex classrooms in public schools.

Despite single-sex education’s longstanding history throughout America and other countries, educators, women’s rights groups and parents have debated its constitutionality. The American Civil Liberties Union is one among several groups who say single-sex education is more harmful than beneficial to students. Under the ACLU Women’s Rights Project, the organization states that its main goal is “to ensure that girls and boys receive equal educational opportunities and are not subjected to different treatment in the classroom based on their sex.”

Galen Sherwin is a senior staff attorney at the American Civil Liberties Union and head of its Women’s Rights Project. “We believe that students deserve to be educated based on their needs as individuals and not using sex as a proxy,” said Sherwin. Her responsibilities include lobbying and legislating against single-sex schools that reinforce gender stereotypes through their teachings. “The ACLU has a longstanding body of work fighting sex discrimination in education, including educational programs that are based on sex stereotypes,” she said.

As single-sex classrooms in public schools became increasingly popular, the ACLU started a campaign called, “Teach Kids Not Stereotypes” which reports on schools across the United States that conduct single-sex classrooms based on gender stereotypes. When they started the campaign in May 2012, the ACLU sent public records requests to schools in 15 states across the country – Alabama, Florida, Idaho, Illinois, Indiana, Massachusetts, Maine, Missouri, Mississippi, North Carolina, South Carolina, Virginia, Washington, West Virginia, and Wisconsin.

In August 2012, Sherwin wrote a report summarizing the ACLU’s findings of the “Teach Kids Not Stereotypes” campaign, including ongoing research from the previous year. The report surveyed 21 school districts in the United States, and found that many of these schools that implemented single-sex classrooms enforced stereotypes and gender biases. One example was a school in Virginia that reported the reading and math habits of male and female students. In that school, boys preferred non-fiction books depicting action, while girls liked fiction without the action. In math, girls benefitted from real-world application of concepts while boys enjoyed “math for math’s sake.”

Over the past four years the ACLU actively sought out single-sex classrooms in public schools and compiled a list of each school in a master summary. The list included schools that believed that “‘hardwired’ physiological and developmental differences between boys and girls necessitated the use of different teaching methods in sex-separated classrooms.” The summary also outlined gender-specific teaching methods that the schools implemented in their classrooms.
The scope of the single-sex debate reaches further than just the United States. In Halpern’s study on single-sex schooling, she and the other researchers identified PISA, or the Programme for International Student Assessment, as an organization that examines the possible effects of single-sex schooling. PISA was founded in 1997 and is a survey administered to 15-year-old students every three years to measure international student performance in science, mathematics, reading, collaborative problem solving and financial literacy. The organization has partnered with the Organization for Economic Cooperation and Development since 2000 to administer the two-hour test to over half a million students around the world who represented the nearly 28 million 15-year-olds internationally.

“PISA, an international group that looks at achievement, found that there were no advantages to single-sex schooling,” said Halpern. “And it’s the same conclusion the department of education’s own funded study shows.”

In 2012, PISA conducted a study called “The Aptitude of Gender Equality in Education: Aptitude, Behavior, Confidence.” Some of the countries involved in the PISA study were Albania, Brazil, Lithuania, Qatar, Peru, the United Arab Emirates, Indonesia and Vietnam. The PISA study found that in top-performing countries like China and Singapore, the performance of boys and girls in the tested subjects were on par with each other. These findings proved that there were no innate differences in the minds and brain development of students in these countries, and PISA encouraged parents to encourage their children accordingly. Including in the 2012 PISA results, a summary illustrated ways in which to close the educational gender-gap. “A concerted effort by parents, teachers, policy makers and opinion leaders is needed if both boys and girls are to be able to realise their full potential and contribute to the economic growth and well-being of their societies.”

The PISA study found that even in top-performing countries, girls do not outperform boys in math and science due to a lack of self-confidence in answering questions and not a lack of abilities to answer the questions. For example, “In all countries and economies that participated in PISA 2012, except Albania, Bulgaria, Indonesia, Kazakhstan, Malaysia, Montenegro, Romania, Serbia and Turkey, girls reported stronger feelings of anxiety towards mathematics than boys.” That anxiety translates into girls performing worse in math than their male counterparts.

It also found that nations in the world, like Finland and Norway that limit their single-sex classroom opportunities have higher equity in their societies.

In the fall of 2010, several of my classmates had transferred to coeducational schools, and by then I had lost any opportunity to join them. As senior in high school, I was ready to leave the single-sex hell that Preston had become for me. My tiny microcosm that had sheltered me for four years was not a realistic representation of the real world where men and women live and work together daily. In the real world, there would not be a nun holding a ruler to your skirt to measure if it was an appropriate length for school. In the real world, I would be competing against both women and men for the same job. In Halpern’s words, “everyone needs to learn
how to cooperate and compete,” and I was part of the “everyone” to whom she referred. “I think we look at kids and see that they’re different,” said Halpern. “We tend to see stereotypes and differences and they’re very, very hard to get rid of.”

I thought of how different my 14-year-old self was compared to the version of myself that was about to embark on her college career. My original optimism about single-sex schools became a distant memory as graduation approached. I was not confident that my high school experience prepared me to coexist with the opposite sex in professional settings, and there would be an adjustment period after I left my single-sex bubble. I felt anxious when I started the college application process, knowing that in a few months, I would have to care about my appearance and compete with the opposite sex at an academic level. These were things I was not used to doing since the last time I was in a coed school in the 8th grade.

When the school counselors and teachers started talking about the college application process, I started applying to prospective schools, careful to choose ones that were coed: Boston College, American University, Baruch College, Fordham University, Iona College. I avoided the prestigious all-women’s colleges where some of my classmates applied, like Barnard College, Ursuline College and Wesleyan College. I could not bear the thought of delaying real-world experience for an additional four years and being closed off to working with males. Enough was enough.

The topic of single-sex education in public schools is polarizing. One side of the debate follows the Leonard Sax school of thought and believes that boys and girls differ in key areas. They believe that boys are competitive in nature and thrive in math and science, while girls need a nurturing hand and excel in English and the arts. The other side is on the side of Diane Halpern and other researchers who say that there is no biological proof that boys and girls have neurological differences, and separating the sexes can inflict as much harm as separating people by race. In “The Pseudoscience of Single-Sex Schooling,” it says, “Beyond fostering academic skills, public education has many goals, including preparing children for mixed-sex workplaces, families, and citizenry.” But that is the way I felt about private and Catholic schools that offered single-sex schooling. I felt no better prepared to deal with these real-world situations as I was finishing up my four years of high school.

It was the spring of 2011, nearly four years after I had made my decision to immerse myself into the world of my single-sex high school. I sat on my brown letter couch, patiently awaiting the familiar slam of the mailbox where I received my Bronx Science rejection letter. The same mailbox which held the letter telling me that I was accepted to Preston High School in the fall of 2007. This time, the letters I received would be ones that liberated me from classrooms where the sexes learned separately because their brains were wired differently or they needed different teaching methods and classroom temperatures in order to be successful.

A creaking noise grabbed my attention, and I looked out the windows to see the mailman stuffing our mailbox with letters. With a final slam, he descended the staircase, grabbed hold of his rolling mail carrier and went to deliver mail to the house next door.
I stood up from the couch and began walking toward the door. The black mailbox was ajar, and I could see a small white envelope addressed to me peeking out of the top. It was from Baruch College, one of the schools where I applied, where of the 13,000 students enrolled in the school, half were male and half were female. The other schools where I applied had similar demographic breakdowns. At Boston College, 54 percent of students were female and 46 percent were male. At Iona college, 51 percent of the student population were female and 48 percent were male. This was the real world that the researchers and advocates were talking about.