Co-ed Schools with Single Sex Classrooms: A Fresh Look at Maximizing the Education Experience of Students

Academy Prep Center of Tampa, located in the heart of historic Ybor City, has taken a different approach to teaching middle school students with the support of substantial evidence. By taking into account the fact that males and females have different learning strategies, co-ed schools with single-sex classrooms provide students with the best chance for maximum academic success. Single-sex classrooms are a relatively new idea in the United States, but the trend is growing. In 2002, roughly twelve public schools offered single-sex opportunities, and as of April 2010 that number was at 540.¹ In this paper I will address: the constitutionality of single-sex classrooms, brain evidence, learning strategies evidence, and finally how this is properly applied in a successful school with incredible results. Co-ed schools with single-sex classrooms might be the minority now, but hopefully as more success stories surface, more administrators and educators will look to the research and evidence and attempt to implement similar programs at their schools.

The Supreme Court of the United States addressed the constitutionality of single-sex classrooms in the landmark case United States v. Virginia. The Virginia Military Institute (VMI) was an all-male military academy whose goal was to produce “citizen soldiers.”² Since its

inception in 1839, no women had been allowed. In 1990 after a female high-school student requested admission, the United States sued the Commonwealth of Virginia and VMI alleging that VMI’s admission policy of only admitting men violated the Equal Protection Clause of the 14th Amendment of the United States Constitution. The Equal Protection Clause states that “no state shall... deny to any person within its jurisdiction the equal protection of the laws.”

On June 26, 1996, the Supreme Court issued its decision. The Court held that the State of Virginia violated the Equal Protection Clause and failed to provide an adequate remedial response. In his concurrence, Judge Rehnquist makes comments that directly relate to the constitutionality of same-sex classrooms. He stated, “It is not the exclusion of women that violates the Equal Protection Clause, but the maintenance of an all-men school without providing any—much less comparable—institution for women.” Thus, in the eyes of same-sex classroom advocates, the case does not outlaw single-sex public education, but rather the critical test is whether or not truly comparable programs exist for both sexes.

Furthering this idea of the constitutionality of single-sex classrooms, in 2005 the United States Department of Education published regulations governing single-sex education in public schools. The new regulations allow coeducational elementary and secondary public schools to offer single-sex classrooms if: they provide a rationale for offering a single gender class in that subject; they provide a coeducational class in the same subject at a geographically accessible location, which may be at the same school or an alternative at a different school which is

__________________________
3 Id. at 520.
4 Id. at 523.
5 U.S. Const. amend. XIV, §1
6 Virginia, 518 U.S at 558.
7 Id. at 565.
geographically accessible; and finally that they conduct a review every two years to determine whether single-sex classes are still necessary to remedy whatever inequity prompted the school to offer the single-sex class in the first place.\(^8\) With these three conditions, the door is open for public schools to experiment with the benefits of single-sex classes, and many are taking the opportunity. Furthermore, charter schools are exempt from all three of the requirements, and single-sex schools are exempt from the first and third requirements.\(^9\) Given this opportunity, why should public schools think of adopting single-sex classrooms? To see what some administrators have in mind, it is helpful to look inside the mind and find out how males and females are different.

In his article *Beyond Presumptions and Peafowl: Reconciling the Legal Principle of Equality with the Pedagogical Benefits of Gender Differentiation*, Loyola University Chicago School of Law professor Michael J. Kaufman provides an in-depth analysis of how the brain develops differently in males and females. It is important to look at the differentiation in brain functioning because those differences can have a direct impact on how males and females learn in the classroom. The following is a brief summary of the basic brain research.

First, there are developmental differences. Research suggests that girls’ brains mature earlier than boys, and that while boys eventually catch up, the earlier development is significant.\(^10\) Evidence indicates that the area where sensory processing occurs, the prefrontal


\(^9\) Id.

lobes, are more developed in females. This potentially means that females can absorb more sensory data than males, which leads to females hearing better, smelling better and receiving more information through fingertips and skin. This type of information would be extremely useful for a teacher when determining a lesson plan. Without single-sex classrooms it would be more difficult to teach the entire class by using strategies that would benefit the most students.

There are also structural differences in the male and female brain at a young age. Of particular interest to teachers when it comes to potential problems, the amygdala, which is directly related to aggression, is larger in male brains than in female brains. This is part of the reason why males are generally more aggressive than females at an earlier age. However, most importantly when it comes to structural differences in the brain is the recent discovery that male and female brains are wired differently. The male brain will churn information, while the female brain will distribute the information to different regions of the brain. Thus, while the two methods achieve the same result, different patterns of brain activity are being used to solve problems. Therefore there are different ways of thinking to get to the same answer for males and females, and if single-sex classrooms are used, teachers will not have to use multiple strategies to assist the various learning strategies of males and females. While undoubtedly even in single-sex classrooms no one style will suit every student, it is still less troublesome than to deal with the different learning strategies necessary in a co-ed classroom. The goal is to

11 Id. at 1081.
12 Id.
13 Id.
14 Id.
15 Id. at 1082.
16 Id.
17 Id.
get the students to learn efficiently and with helpful learning strategies, and single-sex classrooms help achieve this objective

There are also chemical and hormonal differences that can impact classroom behavior and learning.\textsuperscript{18} The male brain secretes less serotonin, which makes males more spontaneous, while females secrete more oxytocin, which makes them more capable of empathy.\textsuperscript{19} Additionally, there are hormonal differences. As a result of increased testosterone, males are more aggressive, while females will be friendlier.\textsuperscript{20} Males also tend to attempt dominance in social situations, whereas females are more passive.\textsuperscript{21} This evidence supports the fact that many teachers already know: males and females behave and learn differently in social situations. In single-sex classrooms in a co-ed school, students get the best of both worlds. They are in learning environments that will facilitate their learning, while also having the chance to interact with the opposite sex and gain valuable social interaction with the opposite sex.

Finally, there are functional differences between the male and female brains.\textsuperscript{22} Using sophisticated technology, researchers have determined that males use their right hemispheres more than their left, and vice versa for females.\textsuperscript{23} The right hemisphere interprets emotional contents, environmental awareness and visual memory, while the left hemisphere processes language, denial, reading and writing.\textsuperscript{24} Furthermore, the resting female brain is as active as

\textsuperscript{18} Id. at 1083.
\textsuperscript{19} Id.
\textsuperscript{20} Id. at 1084.
\textsuperscript{21} Id.
\textsuperscript{22} Id. at 1086.
\textsuperscript{23} Id.
\textsuperscript{24} Id.
the active male brain.\textsuperscript{25} What this translates into the classroom is that the female brain is able to use resources faster, giving it a learning advantage. Meanwhile, the male brain can become overwhelmed by overstimulation.\textsuperscript{26} Where the female brain can handle and process many stimulants at once, the male brain will choose what it thinks is an important stimulant and focus on that.\textsuperscript{27} In a classroom setting this would be very important information. When teaching a classroom of all females, an educator could use multiple stimulants and the females could keep up, while in an all-male classroom an educator would want to focus on more direct stimulants to achieve greater learning success.

While brain research is fascinating, what are the practical effects in the classroom, and why the benefit from single-sex classrooms? The brain research leads to the conclusion that males and females benefit from different learning strategies.\textsuperscript{28} A learning style is defined as an individual’s characteristic way of processing information, feeling, and behaving in learning situations.\textsuperscript{29} Because of the numerous reasons males and females differ in their brain functions and developments, it makes sense that males and females would benefit from different learning strategies that cater to their respective gender strengths.

Dr. Leonard Sax, executive director of the National Association For Single Sex Public Education (NASSPE), believes in the research and advocates that there are differences in what works best for educating females compared with educating males. Specifically, there are

\textsuperscript{25} Id. at 1087.
\textsuperscript{26} Id.
\textsuperscript{27} Id.
\textsuperscript{28} Id. at 1090.
\textsuperscript{29} Id.
gender-specific personality traits which directly impact how children learn.\textsuperscript{30} Contrary to popular belief, Dr. Sax argues that the evidence proves that gender differences are not socially constructed, but rather consistent across cultures.\textsuperscript{31} Furthermore, psychologists have found that females tend to have higher standards in the classroom and evaluate their own performance more critically than males.\textsuperscript{32} In an odd twist, females, while they tend to outperform males if judging by grades, are also more critical in evaluating their academic accomplishments.\textsuperscript{33} Males however, tend to think they are doing better than they really are, and can have a somewhat unjustified sense of accomplishment towards their grades.\textsuperscript{34} These differences further the argument for single-sex classrooms to try and play off of these two different gender traits.

In a co-ed classroom setting, it would be difficult to reconcile the two necessary teaching styles needed to achieve maximum results for the students. For the females, an educator would want to encourage the females, to build their self-esteem and self-confidence. Conversely, with the males, an educator would want to give the males a realistic viewpoint of their academic standing. Congratulate them and praise them when it is deserved, but don’t let them become complacent with grades and think that mediocrity is acceptable. This contrast in styles would be difficult to balance in a co-ed classroom, and a teacher might run the risk of not properly balancing the two styles. This might alienate certain students, or be ineffective on the majority of students.

\textsuperscript{31} Id.
\textsuperscript{32} Id.
\textsuperscript{33} Id.
\textsuperscript{34} Id.
Another important factor in support of single-sex classrooms is the different environments that males and females successfully learn in. Given the differences in male and females brains and learning styles, the next logical step is that the different genders will benefit from different educational environments. Based on the evidence, girls tend to look at an educator as a friend, an ally. Thus, a female students’ potential best learning environment is a safe classroom, where a female feels comfortable and welcome. This could lead directly to a sense of comfort and will help build self-esteem and confidence in their work. This might not be the best classroom environment for males however. Males tend to need more structure and discipline, and that would need to be fortified in an all-male classroom setting.

I thus far discussed the constitutionality of same-sex classrooms, how brain research leads to evidence that the genders benefit from different learning styles and classroom environments. One of the reasons, besides the evidentiary research that suggests these schools are a good idea, that I am such a proponent of co-ed schools with single-sex classrooms is that I had the honor to teach at one. The following will be an analysis based on my experience teaching at one of these remarkable and visionary schools that will showcase the benefits of co-ed schools with single-sex classrooms. When done properly, as I believe is this case with this school, the results can be astonishing.

It is worth mentioning that Academy Prep Center of Tampa is not a public or a charter school, but is privately funded. While my discussion so far has been advocating for public

---

35 Id.
36 Id.
schools to join the single-sex classroom discussion, Academy Prep still has relevance because of its uniqueness and its success. Just because it is a private school does not mean that the results achieved at Academy Prep would not translate to a public school that properly implements what Academy Prep has promoted. Unlike most private middle schools, Academy Prep is only for students who qualify for need-based scholarships and who excel in their academic work.\textsuperscript{38} To qualify, a student must be eligible for the federal free or reduced lunch program, complete an admission test that shows academic achievement and dedicate themselves to being a good student and a positive member of the community.\textsuperscript{39}

Once accepted, students are enrolled in a rigorous curriculum that will keep them at schools for eleven hours a day during the week and a couple of Saturdays during the school year.\textsuperscript{40} Furthermore, they attend a summer session that will prepare them for the upcoming school year and also enables the administration to look at new students for potential admittance.\textsuperscript{41} It is within this rigorous curriculum that Academy Prep utilizes the benefits of single-sex classrooms. The campus is divided into three buildings, one administrative building, a building for male classes and a building for female classes. There is also a large pavilion and outdoor eating area for the students for recess, gym and lunch where the integration of genders is allowed.

Within the walls of their respective buildings, males and females focus strictly on academics in their single-sex classrooms in the morning. Their core classes consist of Math,
English, History and Science. After lunch, they will have Language, and possibly gym or music. The core classes however are the essence of Academy Prep. Within those single-sex classrooms, the teachers employ various teaching styles, all geared towards maximizing the academic success of their students. As described above, the teaching styles tend to differentiate depending on what gender is being taught. And while no teacher teaches the same way, I believe they all would agree that having the single-sex classrooms is an obvious benefit. Especially with middle-school students, who already have a hard time focusing, catering to less learning styles is beneficial for the whole room. In any classroom distractions are disruptive, and with the hormones of middle-school students, having single-sex classrooms, besides the obvious benefit in teaching, also contributes to students focusing more on education and not on impressing the opposite sex. In addition to the small class sizes, only dealing with one gender enables the teachers and the students to gain a comfort level with each other and to focus on how best to maximize the individual talents of the students.

One of the arguments against single-sex classrooms is that it will not enable students to socially mature during these important pre-teen years. However, in co-ed schools with single-sex classrooms that argument is diminished. At Academy Prep, the male and female students still interact during extracurriculars, music, gym and Saturday field trips. During the core educational classes they are not inter-mingled, but during the more social yet valuable school activities, they have a chance to interact and gain valuable social experiences. When Academy Prep students are admitted to various high schools in the regional area or top-notch schools across the country, they will come equipped with the educational and social skills to immediately become successful at the high school level. With the help of a dedicated graduate
support staff, the school tracks its graduates as they have continued success, supplementing the idea that Academy Prep prepares students for the community, and then continues to follow them even after they have graduated because they care about their continued success. Academy Prep graduates are expected to be valuable members of the community, with the idea that the community has given so much to them that when the time comes, it will be their turn to give back to the community.

The Academy Prep system, while unique, can be implemented in other schools. It will take a dedicated administration, excellent teachers and willing parents and students, but it can be done. Taking into account the research and benefits of co-ed schools with single-sex classrooms, hopefully the number of schools trying out various programs will continue to rise. Based on the brain evidence, different learning styles and successful schools like Academy Prep, the benefits of implementing a system that utilizes single-sex classrooms is an excellent option for producing successful students.