# Single sex education



Within the last ten years, the number of single sex schools has increased rapidly because educators are constantly searching for ways to better educate children, and through research, it has been determined that separating the sexes is a viable option that can benefit both male and female students. Girls and boys have different learning styles due to psychological differences; therefore, by separating them in the classroom, students are able to learn within an academic environment that caters to their gender.

In addition, the inevitable conflicts that result between girls and boys in a coeducational classroom are sometimes too distracting for students to ignore. Eliminating these distractions has created room for students to focus on their schoolwork rather than their social status in relation to the opposite sex.

Single sex education is an effective method of education because girls and boys have many psychological differences that affect how they perform in school, and by separating males and females, the pressure to impress the opposite sex is relieved, and teachers are able to focus their lesson plans to the specific gender of their students, which increases the academic success of all students. It has been proven that the female brain equips females with a better attention span and the ability to perform highly in language-based activities when compared to their male counterparts.

Girls are able to sit still and pay attention longer due to their high number of cortical areas devoted to verbal functioning (McBride). This directly correlates with the increased amount of information retained by girls

throughout the school day. In contrast, boys have difficulty sitting still in school because they have less serotonin and oxytocin than girls (McBride). Serotonin is the neurotransmitter responsible for relaxation so a low number of serotonin causes a person to be anxious and distracted.

Not only does being restless lower the chance of understanding and retaining information, it increases the opportunity for behavior problems. Furthermore, girls possess the ability to use both sides of their brain simultaneously when listening to someone speak, while boys can only use the left side of their brain (" The Benefits"). As a result, girls have better language skills than boys because they are capable of " mental cross talk", the ability of the right and left side to communicate with each other concurrently.

Using both the eft (logic) side and the right (feelings) side of the brain is helpful when participating in language activities such as describing and analyzing the plot of a story. Paying attention in class, retaining information, and participating in language activities is more easily accomplished by girls because of their psychological makeup. When girls are given the opportunity to carry out these activities in an all girls school, their academic performance is improved. Boys, however, are generally successful in math and spatial activities because their brain enables them to understand the concepts needed for math and sciences.

Boys comprehend subjects such as math and physics easier than girls because " they [boys] are more capable of grasping the concept of shapes and abstract symbols" (Blundin). In males, " the hippocampus is prewired to

function as a dedicated microprocessor for spatial geometry" (Sax 101). This means that their brains are better equipped for understanding math. Girls have a more difficult time grasping the concept of pictures and symbols, and as a result, mathematical concepts may not be a natural instinct for them.

In addition, boys are better at mapmaking and spatial relations in compass terms (north, south, east, and west) (Sax 110). An experiment averaging the time taken for girls and boys to reach a destination with both compass terms and landmarks shows the consistent difference in boys' and girls' performances when following different sets of directions (Sax 100). As the preceding chart further shows, boys are more efficient in spatial tasks with compass instructions, while girls have a difficult time following these kinds of directions.

Girls have more difficulty with these kinds of directions because they use their cerebral cortex, the area used for talking and understanding, when they are following the directions, while boys use their hippocampus, the area of the brain that is used for spatial navigation (Sax 100). Unfortunately, directions are rarely given in terms of landmarks, so girls are usually at a disadvantage. Overall, the male brain is equipped for math and spatial activities, which puts them at an advantage over girls in math and sciences.

An effective way to teach boys to embrace their weaknesses in school and to further improve their academic strengths is to place them in an all boys school. The teachers at gender specific schools are able to structure their lesson plans strategically in order to teach their specific gender of students in the most effective way. Teachers at an all boys take into consideration that " research shows that boys don't hear as well as girls do" (Richmond), so the teachers intentionally speak louder when conducting their lesson.

Because " boys tend to overestimate their school performance" (Aiken), teachers can provide a " reality-check" in order to challenge boys to do better. This can help to encourage boys to put forth their best effort constantly and to not fall behind in school. In addition, boys tend to respond positively to team competition in academics (" Top Teaching"). Teachers at an all boys school may conduct their math review by engaging the boys in a game, which is a more effective method than distributing a worksheet for the boys to complete.

Teachers that have all boy classes know that in order to create an effective learning environment, they need to speak louder, remind the boys to constantly work diligently, and incorporate competition into the lesson plans. In an all girls setting, teachers use different teaching strategies in order to create an active learning environment. When addressing math in an all girls class, " girls may learn math more easily if their teacher uses practical applications and 'story problems'" (" Girls' Learning").

Rather than solely using numbers to teach a math lesson to girls, presenting the problems as real life examples will give the girls an opportunity to relate to the subject, therefore more easily learning and understanding math. In addition, girls place much emphasis on personal relationships with both their classmates and their teachers. Naturally, allowing girls to work together in small groups will not only help them understand the material on a more thorough level but will help develop the necessary relationships that girls need (Weil).

A successful teacher at an all girls class will make a conscious effort to get to know all of her students on a personal level because a close relationship is very important to the girls. Communicating with the female students and providing an abundant amount of encouragement is vital to their success because " girls consistently rate themselves lower on self-esteem than boys" (" Why a Girls'"). An increase in the girls' self esteem will help them to realize their full potential and to strive for success.

Teachers at all girls schools use certain teaching strategies such as presenting math problems as real life situations, organizing girls in small groups to work together, and consistently providing encouragement, in order to provide a productive environment for the girls in which they can thrive. The division of males and females is greatly beneficial on a social level as well. In a single sex atmosphere, students are relieved of the pressure of impressing the opposite sex. " It can help boys stay focused in class, rather than focusing on girls in class" (Yokley).

Boys in an all boys school are not worried about making an impression on girls during class; instead, they are more interested in the material that is being presented to them. Likewise, girls will not feel so much pressure to impress boys in class, and they will use the energy that they may have put towards their appearance into their academics. Furthermore, because the students are able to develop close relationships with each other, they are at " no risk of sounding too dumb or too smart" (Ayres).

This allows the students to be more open with their thoughts on every subject, and will eliminate the fear of embarrassment. Research has also shown that a single sex learning environment opens up opportunity where " students are free to explore educational interests that they might otherwise ignore in a standard, coed environment" (Kasic). For example, boys are more likely become involved in singing and dancing at an all boys school than a coeducational school because the gender schema is nonexistent in a single sex education environment.

The students of an all boys school realize that singing and dancing is not necessarily a feminine activity but a fun way to learn at school (Kasic). The elimination of the need to make an impression on the opposite sex and the relieved pressure of conforming to gender roles creates a positive and productive learning environment for all students. Additionally, students that have received a single sex education are more likely to pursue careers that are stereotypically those sought by the opposite sex.

Careers that are typically female dominant, such as art, poetry, and dance, are more likely to be considered by males that attended an all boys school because " they are not ashamed to pursue " feminine" careers because they are completely confident in themselves" (Russell). By single sex schools presenting students with the opportunity to explore subjects in depth that they may not have explored in a coeducational environment, the students are more likely to discover a talent which they did not know existed.

Being constantly encouraged by teachers and peers, rather than being made fun of, creates a solid base of confidence in the student, which he or she will

later use when pursuing the career of his or her choice, whether it is " gender appropriate" or not. Research has shown that females do not succeed as highly as males in subjects such as math and physics, which consequently steers females away from careers in such fields. However, " alumnae of single-sex schools are three times more likely than those from coeducational schools to pursue a career in engineering" (Taylor).

When females are given the opportunity to learn in an environment that caters to their strengths, their success and interest in math and sciences will be greater, allowing them to pursue these career fields. Females and males in a girls or boys only learning environment are provided with a well rounded academic curriculum, which builds their confidence up to a level that enables them to step outside of their comfort zone and into a career conventionally filled by the opposite sex.

In conclusion, the division of males and females in school is beneficial to all students on many different levels. Because of the obvious differences between the male and female brain, different learning styles are more effective for males, than for females. A single sex educational environment allows teachers to teach specifically to the gender of their students, making it easier for the students to succeed. Also, gender specific classrooms eliminate the stress brought upon children by the social interaction with the opposite sex.

With distractions eliminated and stereotypes ignored, students are more comfortable with themselves on a personal, and therefore, an academic level. As a result of the self confidence developed by success in all areas of study, students of single sex schools are likely to develop interests and career aspirations that are usually considered those of the opposite sex. Educators realize the many advantages to single sex education, in both males and females; therefore, the number of single sex classrooms will rise with every year.

## Reference

https://scienceblog.com/32113/community-acquired-mrsa-becoming-morecommon-in-pediatric-icu-patients/

http://www.scienceblog.com/community/older/1999/A/199900741.html

http://www.lasvegassun.com/news/2009/jul/19/single-sex-classes-beingpraised-many-levels/