Success of Students in Coed Schools vs. Single-Sex Schools

In my middle school, high school, and undergraduate college science classes, I have always noticed a greater appreciation of science from males than females. As a teacher, I sometimes see the same trend among male and female students in my classes. Although there are laws that prohibit discrimination due to gender and many believe that males and females are capable of performing equal jobs, I believe that single-sex classrooms should be encouraged.

Research states that students, regardless of socioeconomic classes, attending single-sex schools are more proficient and confident in math and science than students in coed schools. A study was performed to research the effect of school size and school type (single-sex vs. coed) on academic performance in 1,954 high schools throughout England. The data was reported by the National Foundation for Educational Research (NFER) (O’Leary, 2000). It was concluded that in single-sex schools, girls of all ages take more advanced placement math and science courses than girls at coed schools. Girls at single-sex schools also performed better in advanced placement math and science courses than girls of equal ability at coed schools. When comparing boys at single-sex schools vs. coed schools, it was revealed that boys with low achievement perform better at single-sex schools; boys with higher achievement perform equally as well in single-sex schools as coed schools.

A study released by the Australian Council for Educational Research showed that not only do all students in single-sex schools achieve higher scores in science, but they are also better behaved. The report released by the Australian Council for Educational
Research was based on a six-year study done in Australia with 270,000 students in 53 academic subjects (Cresswell, 2002). The study suggests that students are better behaved in single-sex schools because there are more accommodations for boys and girls who are going through developmental stages (Cresswell, 2002).

In many colleges, there is a greater amount of male students majoring in math, science, and engineering than females. There is also a greater percentage of female students who transfer out of science, math, and engineering. A study was done by female science students and faculty at Brown University. It states reasons why college women have withdrawn from science, math, and engineering. Although there was no difference in the GPA, conceptual difficulty, or work ethic of male and female science students in the study, more females withdrew from being science, math, and engineering majors than males (Targan, 1996). Findings show that some reasons may be the difference in communication between the genders. Males respond more quickly and confidently, even when their answers are incorrect. Women respond less frequently and need more thought time to formulate their responses. It was also observed that females are interrupted more often than males by their professors, which may cause them to hesitate to participate in future discussions.

The study at Brown University and an article entitled “Girls Learn Differently” both suggest that the difference in self-confidence between male and female students directly influence their performance in class. Of the students at Brown University who withdrew from the science track, 70%-80% stated that they felt discouraged by their grades, even though they were the same as male students (Seymour, 1993). The study by Brown University suggests that boys contribute failure to external factors, such as an unfair
exam or lack of preparation on behalf of the professor. Girls look internally, believing that they are inadequate (Targan, 1996).

The report by the female science students and faculty at Brown University also states that there is a difference in the behavior of male and female students in labs at coed colleges. It was noticed that females are more passive than males and suggests that this difference may be due to differences in childhood socialization. At younger ages, it is possible that boys are more frequently exposed to mechanical toys, which increase their level of confidence when participating in labs. When observing females of the same academic ability at single-sex schools, it was noticed that they were more engaged in labs than their counterparts in coed schools. It may be inferred that the females are more engaged in single-sex schools because they are not intimidated by males.

There is extensive research showing that females perform better in single-sex schools than coed schools. The research also shows that males of higher achievement levels are unaffected, while males of lower achievement levels also perform better in single-sex schools. Although there may be many contributing factors to the increased performance of students in single-sex schools, one factor that I noticed continuously was the level of confidence. Single-sex schools increased self-confidence of students which increased their scores in math and science classes as well as their likelihood of majoring in science.

Some people who oppose single-sex classes and schools believe that it reinforces stereotypes that “girls are gentle, weak, and can’t handle rough environments of the real world”, while boys are “incorrigible” (Bailey, 1992). However, if we focus on our goal, which is to increase the number of male and female students who are successful in science and are scientifically literate, the results indicate that single-sex classes and/or schools will allow us to achieve that goal.
Works Cited


