

Single-sex schools, the myths of socio-economic status and gender stereotyping and the push for more women in STEM

A recent article on apolitical by Odette Chalaby looked at some of the research on girls and STEM (science, technology, engineering and maths) and questioned whether single-sex schools may provide a solution. Single-sex schools are often portrayed as anachronistic institutions that do not prepare students for the real co-ed world. Nothing could be further from the truth and getting girls into STEM is just one piece of evidence supporting the case for single-sex schools.

Across the world, initiatives are being introduced to attract more girls to STEM in a bid to improve gender balance in these traditionally male dominated fields; fields that are of significant importance to the global economy.

One of the first steps toward righting this imbalance is to provide learning environments that build girls' confidence and counter gender stereotyping. There are multiple studies demonstrating not only that girls in girls' schools are less harmed by gender stereotyping than girls in co-educational environments but that they are also more confident and more likely to study and do well in STEM subjects.

In fact, research from Monash University, published in March 2018, found that girls at single-sex schools were 85% more likely to take advanced mathematics than girls in co-ed schools, 79% more likely to study chemistry, 68% more likely to take intermediate mathematics, and 47% more likely to study physics.¹

Other studies^{2,3,4} which allow for socio-economic status also show unequivocally that students in single-sex schools benefit from a learning environment free from gender stereotyping, unconscious bias and social pressure. Simply put girls' schools provide an educational setting that is dedicated to girls and how they learn, without competition and social pressure from boys, and this is enormously empowering for girls.

One 2017² study led by Professor Christian Dustmann of University College London, found that students at single-sex schools significantly outperformed those at co-ed schools on university entrance exams from 1996 to 2009 even after accounting for socioeconomic status. Another⁴, conducted for the NSW Centre for Education Statistics and Evaluation in 2014, found that even when adjusted for variation in school intake policies (such as academic selection) and socioeconomic status, students in single-sex schools still performed better than their co-ed counterparts.

Proponents of co-ed models such as US psychologist Prof Diane Halpern like to assert that gender stereotyping is reinforced in single-sex settings. The meta-analysis⁵ often referred to by Halpern and her colleagues contradicts that very suggestion. It actually found that female students at co-educational schools are slightly **more** likely to endorse gender stereotypes than their single-sex counterparts, the study also found no academic benefit to co-educational schools.

While the data on STEM uptake by girls in single-sex schools is very positive, it is vital to remember that a good education is not solely about academic performance, it's also about nurturing the development and growth of confident, resilient and inquisitive global citizens. Citizens who still face a 'real-world' with real gender inequality.

Graduates of all-girls schools are well prepared for this 'real world' — a world where according to the Global Institute for Women's Leadership just 23% of national parliamentarians are female globally, while women make up just 26% of news media leaders, 27% of judges, 25% of senior managers, 15% of corporate board members and 9% of senior IT leaders.

All-girls learning environments build confidence, grit and a readiness to step up and lead and to challenge the people and opinions that perpetuate gender inequality — just ask Hilary Clinton or any other girls' school or college graduate.

Loren Bridge

Executive Officer, The Alliance of Girls' Schools Australasia

References

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