

NEWSLETTER

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Single-sex education apparently has no positive effect on school performance! What are the facts?

Results of a UK government study

During the past year certain European media outlets such as slate.fr have been reporting on increasing opposition to single-sex schooling in the United States. First there was an article in Science magazine: The Pseudoscience of Single-Sex Schooling. Then the ACLU (American Civil Liberties Union) sent letters to school districts requesting measures to discontinue the single-sex programmes that had been introduced in public schools.

In all that has been said and written in opposition to single-sex education there is one claim from the media reporting that we find interesting because, unlike many others, it is measurable and verifiable: "There is no well-designed research showing that single-sex education improves students' academic performance!". In fact, this claim is not inaccurate or biased – it is quite simply erroneous.

In 2005, the US Department of Education conducted a study entitled Single-Sex versus Coeducational Schooling: A systematic Review². It set out to systematically analyse the body of scientific literature available on this topic.

Many articles were excluded because of their lack of scientific rigour. Among other criteria, the study looked at the question of exam re-

sults, which was addressed in 43 of the studies. Of this total of 43 studies, 15 studies were in favour of single-sex education, one was in favour of coeducational schooling, 23 concluded that neither one type of schooling nor the other had any influence on marks and 4 found that each type had their own particular advantages. It is surprising that American specialists in the field are unaware of the work of their own Department of Education!

"There is no well-designed research showing that single-sex education improves students' academic performance". (Diane F. Halpern et al.)

In fact, this claim is not inaccurate or biased – it is quite simply erroneous.

As regards improvement in exam results, we will highlight one of the more interesting studies, since it is not possible to analyse them all in this article. This particular study examined the impact of school size and single-sex education on the performance of pupils in Eng-

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^{1.} Diane F. Halpern, Lise Eliot, Rebecca S. Bigler, Richard A. Fabes, Laura D. Hanish, Janet Hyde, Lynn S. Liben, and Carol Lynn Martin, The Pseudoscience of Single-Sex Schooling, *Science*, 23th of September 2011.

^{2.} http://www2.ed.gov/rschstat/eval/other/single-sex/single-sex.pdf.
3. Spielhofer, T., O'Donnel, L., Benton, T., Schagen, S., Schagen, I. (2002) The impact of school size and single-sex education on performance, National Foundation for Educational Research.



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A pupil at Tiffin Girls' School. Based on GCSE results, it was the top school in England in 2011. Source: http://www.tiffingirls.kingston.sch.uk/dt

land³. This study has the advantage of measuring the effect of the two types of schooling by comparing similar schools and pupils with the same level of primary education, which is nearly always mixed in the UK. The aim of the authors was to be sure that the progress of pupils aged between 11 and 15 at secondary level can be attributed to single-sex schooling and not to some other factor.

The study included 2,952 schools and 369,341 pupils, 11% of whom were educated in single-sex schools. Depending on the type of school and pupil, in single-sex environments there was either an improvement in General Certificate of Secondary Education (GCSE) marks or else no significant difference. The authors also found that the improvements were significantly better as a result of the impact of single-sex education rather than the ideal school size⁴.

The study (conducted by the UK government), offers an unbiased analysis of the impact of single sex education, with a sample size of over 350'000 pupils.

In schools that do not have an entrance exam (comprehensive schools, 94.8% of the single-sex schools), girls achieved better results in all subjects, particularly science.

In schools with an entrance exam on the other hand (selective schools, 5.2% of the single-sex schools), there was no significant improvement in the girls' results.

For most boys at schools without an entrance exam, a single-sex environment seems to have little effect, apart from in the case of pupils classified as weak on leaving primary school and apart from science subjects in pupils identified as able after primary level. Conversely, there is a very clear improvement in the performance of boys at "selective" schools.

The diagram below illustrates this data.

Improvement of Marks in Single-Sex Schools compared to Co-Ed Schools	Schools · without an · Entrance · Exam (94, <u>8</u> %)¤	Selective Schools¶ (5,2%)¤
Girls¶ Low marks¤	Significant¤	Non- significant¤
Girls¶ Average marks¤	Significant¤	Non- significant¤
Girls¶ Good marks ¤	Significant¤	Non- significant¤
Boys¶ Low marks¤	Significant¤	Significant¤
Boys¶ Average marks¤	Non- significant¤	Significant¤
Boys¶ Good marks ¤	Significant in science only¤	Significant¤

In summary, in the English system, more girls got improved results than boys as a result of being in a single-sex environment, given that single-sex schools without an entrance exam account for 94.8% of the single-sex schools analysed and given that within these schools, boys with average marks achieved only a negligible improvement in their performance.

So it is still worth pointing out that even though the differences are not significant, they do nevertheless still point in favour of singlesex education. So it is a win-win situation.

4. According to this study, schools of medium size (about 180 students per grade) seemed to do best. At smaller schools, there was a lack of course offerings especially at the advanced levels.

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Furthermore, this difference could be made more apparent if we analyse a pupil's progress over 7 years, i.e. from 11 to 17 rather than 11 to 15. This would be particularly useful in the case of boys, who finish their growth spurt at the age of 15 and usually start to catch up on the girls once they reach that age. The fact that the boys' performance improves in the "selective" schools is also worth underlining. Could it be that, unlike girls, they are stimulated by the competition?

Another noteworthy fact is that when schools are classified solely according to their GCSE results, the single-sex schools grab most of the top places (75 of the top 100 in 2011), even though they only represent a tiny percentage of the total! "These schools get good results not because of their single-sex intake but because of the culture of the highly traditional families who choose this type of school," proclaimed a teacher from Oxford when asked about this ranking list.

So the debate on the impact of single-sex schooling on performance cannot really be settled, given how hard it is to evaluate the influence of one parameter in isolation from many others (motivation, parents' income and background, training of teachers, teaching methods, etc.). Single-sex school teachers themselves recognise that this environment has no effect on results if the teachers do not have the right training. So our critics will always be able to put the



Pupils at Wilson's school, a boys' school with an entrance exam, but without fees. Based on exam results, it was England's top boys' school in 2011 and the third best overall. Source: http://www.wilsonsschool.sutton.sch.uk/dept/classics/latin/latin.html

impact of single-sex environments on exam results into relative terms, or play it down. Nevertheless, the research does seem to support the notion.

Leaving the experts' quarrels aside, the EASSE believes that the only thing that really counts is respect for the freedom of parents to choose a school that matches their convictions. The fact is that no country in Europe has an education system with a wide enough offering to guarantee the freedom to choose a single-sex school. We are certainly not seeking to undermine mixed-sex education; our only aim is to even up the balance.

Jean-David Ponci



Ibid. Source: http://www.wilsonsschool.sutton.sch.uk/dept/music/music.html

5. Source: http://www.telegraph.co.uk/education/leaguetables/8723085/GCSE-results-2011-school-by-school.html



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Summary of Laws on the Legitimacy of Single-Sex Education

Universal Declaration of Human Rights

Art. 26, 3. Parents have a prior right to choose the kind of education that shall be given to their children.

Convention against Discrimination in Education 1960 (UNESCO) ratified by 96 States

Art. 2. When permitted in a State, the following situations shall not be deemed to constitute discrimination, within the meaning of Article I of this Convention:

(a) The establishment or maintenance of separate educational systems or institutions for pupils of the two sexes, if these systems or institutions offer equivalent access to education, provide a teaching staff with qualifications of the same standard as well as school premises and equipment of the same quality, and afford the opportunity to take the same or equivalent courses of study;

The International Covenant on Economic, Social and Cultural Rights (ICESCR) ratified by 160 States, but not the U.S.A.

Article 13. al. 3. 3. The States Parties to the present Covenant undertake to have respect for the liberty of parents and, when applicable, legal guardians to choose for their children schools, other than those established by the public authorities, which conform to such minimum educational standards as may be laid down or approved by the State and to ensure the religious and moral education of their children in conformity with their own convictions.

In Europe

Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms, ratified by 45 European States. Switzerland didn't.

Article 2 – Right to education

No person shall be denied the right to education. In the exercise of any functions which it assumes in relation to education and to teaching, the State shall respect the right of parents to ensure such education and teaching in conformity with their own religious and philosophical convictions.

In the U.S.A.

No Child Left Behind Act (NCLB), specifically, sections 5131(a)(23) and 5131(c)





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