Executive Summary

This paper analyses the latest data from The Department for Education on 12/02/2026. The analysis overwhelmingly highlights the high attainment of girls in girls only education and strong representation of girls' school students in STEM education. Specifically, the findings show:

STEM Subject Participation at A-Level

Girls attending all-girls' sixth forms are significantly more likely to study mathematics and science at A-level than their counterparts in co-educational schools.

- They are **2.9 times more likely** to take Further Mathematics.
- They are **2.2 times more likely** to take Physics at A-level.
- They are **2.1 times more likely** to take Computer Science at A-level.
- They are also more likely to take other STEM subjects:
    - Biology (**38% higher**)
    - Chemistry (**78% higher**)
    - Maths (**86% higher**)

In 2023-24 the figures were as follows:

- They are **2.9 times more likely** to take Further Mathematics.
- They are **2.3 times more likely** to take Physics at A-level.
- They are also more likely to take other sciences:
    - Biology (**38% higher**)
    - Chemistry **(83% higher**)
    - Computer Science **(79% higher**)

Academic Performance

The analysis also confirms that girls in single-sex schools consistently **outperform their peers in co-educational schools** at both Key Stage 4 and Key Stage 5.

Findings Across the UK

Unfortunately, the devolved nations do not publish performance tables at a school level meaning it's not possible to ascertain STEM uptake and academics for girls in girls' schools in Wales, Scotland and Northern Ireland.

Data Source and Methodology

One key data source was used in this analysis and paper:

- **The DfE School Comparison dataset:** Provides detailed school performance metrics for all schools in England, including A-level subject choices and attainment levels at KS4 and KS5. This dataset enables a comparative evaluation of academic trends among different school types, and particularly those for girls' schools.[1]

The methodology employed in this report involved detailed statistical analysis of the datasets, including comparisons of subject uptake and performance trends.

Structure of the Report

This report is organised into key sections, each focusing on a critical aspect of girls' education and academic choices:

- **Girls' Representation in STEM:** This section examines A-level STEM subject choices.

- **Girls' Academic Achievement:** comparing those attending girls' schools versus co-educational settings. A detailed analysis of academic performance at both Key Stage 5 (A-levels) and Key Stage 4 (GCSEs), with comparisons between different school types.

Importance of the Analysis

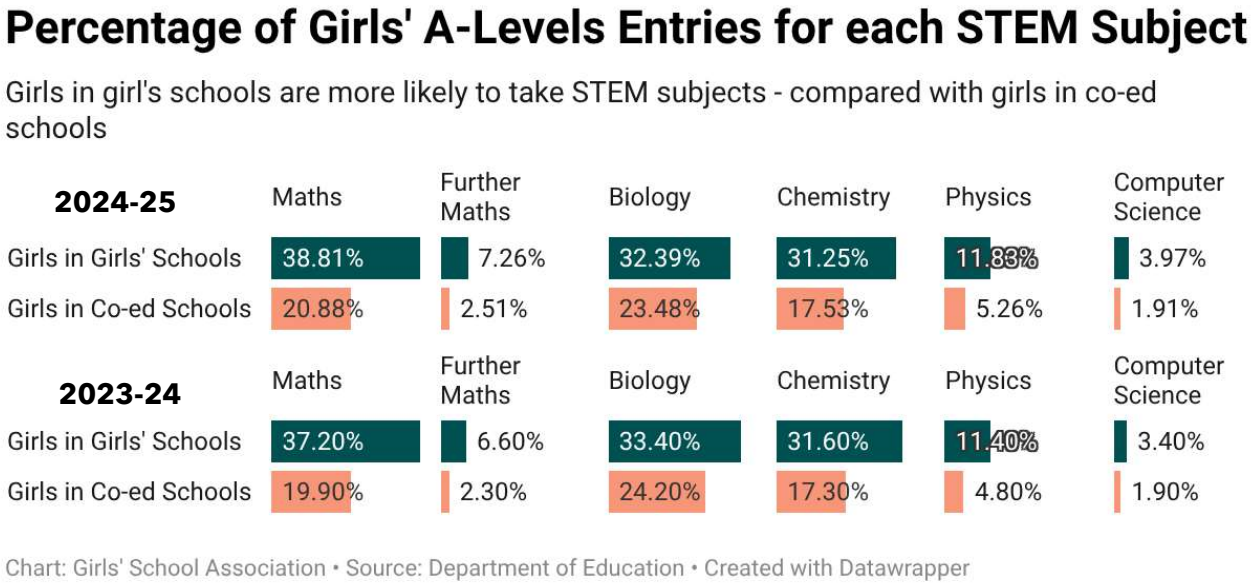
This study contributes to ongoing discussions about gender representation in STEM and the impact of school environments on academic choices. By examining new data from 2024-2025 and comparing it with previous years, the report provides insights into the effectiveness of girls' schools in fostering STEM engagement and academic success. It also identifies potential areas for future research and policy development, ensuring that educational institutions continue to support female students in achieving their full potential.

1. Girls' representation in STEM

[1] DfE data is available here https://www.compare-school-performance.service.gov.uk/download-data

1a. Girls' A-level Entries in STEM Subjects

DfE release KS5 (A-levels) entries by school for Maths, Further Maths and Science subjects, split by gender and type of school, allowing us to analyse the subject choice of girls by the type of school they attend.



Biology, Maths and Chemistry continue to be the most popular STEM subjects for girls at A-levels.

Girls in girls' schools are almost three times more likely to take Further Maths and more than twice as likely to take Physics & Computer Science at A-level – compared with girls in co-ed schools.

The uptake of other sciences is also higher with Biology 38% higher, Chemistry 78% higher and Maths 86% higher in girls' schools compared with girls in co-ed schools.

The percentage of subject entries in Maths, Further Maths, Physics and Computer Sciences have increased for girls in both types of schools since 2023-2024, while we see decreases in Biology and Chemistry, but a small increase in Chemistry for girls in co-ed schools.

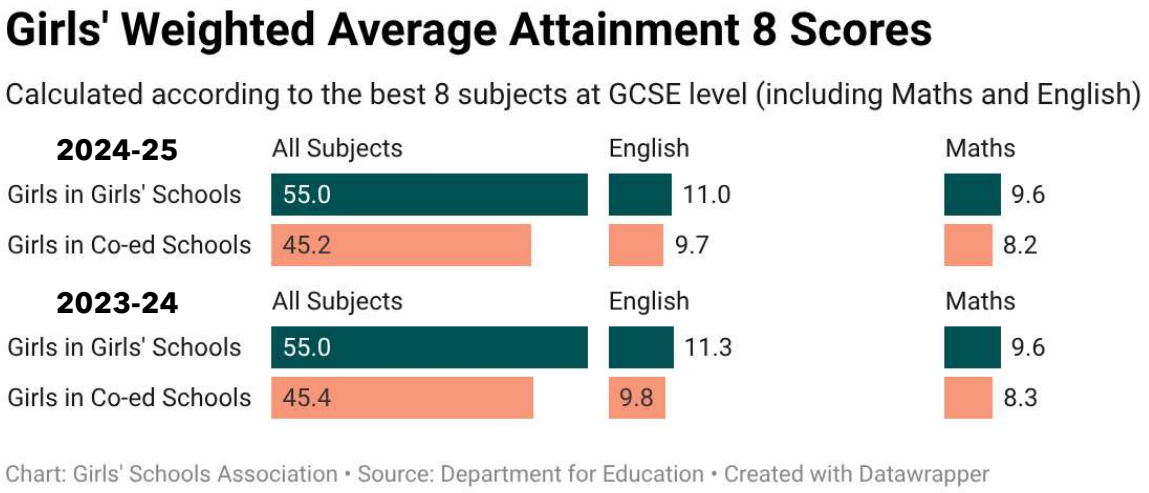
Computer Science continues to have the largest growth in uptake for girls in girls' school (although it remains low relatively). The percentage of girls taking Computer Science is 16.42% higher in girls' schools compared with the 2023-2024 academic year.

The gap between girls in girls' school and girls in co-ed schools is widening for Maths, Further Maths and Computer Science, but shrinking for Biology, Chemistry & Physics.

2. Girls' academic achievement

4a. KS4 Attainment Data[2]

The Key Stage 4 (KS4) data reports the achievements of students using the Attainment 8 measure which allocates points according to grades achieved by pupils in a curated group of 8 subjects at GCSE level (including English, Maths, Sciences, EBACC and others).



Girls perform better in girls' schools than in co-ed schools, looking at all subjects, and for Maths and English separately.

[2] KS4 analysis is based on provisional DfE data. We don't expect the final data to change the conclusions

Weighted Average Attainment 8 Scores of All Schools

Calculated according to the best 8 subjects at GCSE level (including Maths and English)

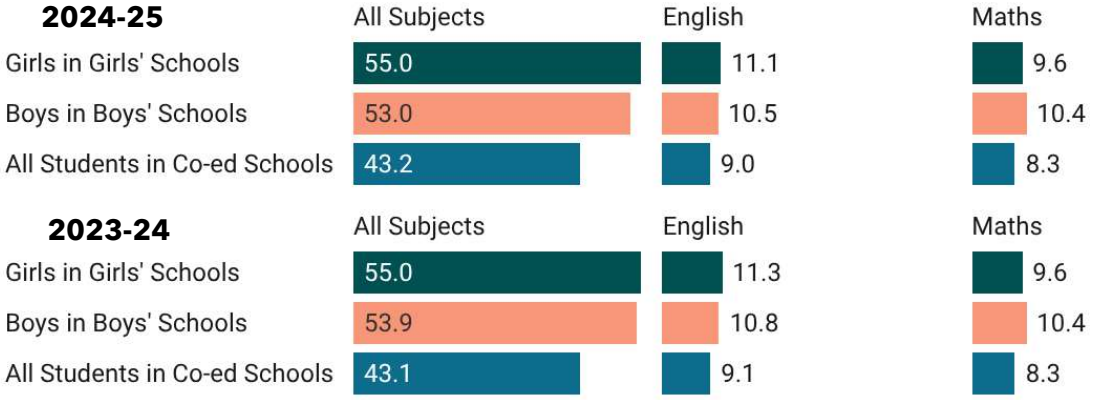


Chart: Girls' Schools Association • Source: Department for Education • Created with Datawrapper

Higher attainment continues to be seen at single-sex schools, compared with co-ed schools when looking at all subjects, and when looking at Maths and English separately.

Across the board since last academic year, we have seen either a drop or no change in the weighted average attainment 8 score, except for a nominal rise for all students in all subjects.

The most significant decline is in the weighted average Attainment 8 scores for boys in boys' schools in all subjects, down by 0.9 compared to 2023-24 and notably in English particularly.

4b. KS5 Attainment Data

The DfE 16-18 performance tables report achievements of students aged 16 to 18 who are at the end of advanced level study (the end of Key Stage 5 or KS5). The analysis below uses the average point score A-levels entry for students who were entered for at least one AS or A-levels qualification.

KS5 A-Level Data

	2024-25			2023-24		
	Girls in girls' schools	Boys in boys' schools	All students in co-ed schools	Girls in girls' schools	Boys in boys' schools	All students in co-ed schools
ALL SCHOOLS						
Weighted average point score per A level entry	41.8	43.6	34.9	41.7	43.5	34.4
Average point score per A level entry expressed as a grade	B+	B+	C+	B+	B+	C+
INDEPENDENT SCHOOLS						
Weighted average point score per A level entry	45.4	46.6	41.7	45.3	46.6	41.5
Average point score per A level entry expressed as a grade	A-	A-	B	A-	A-	B

Table: Girls' Schools Association • Source: Department for Education • Created with Datawrapper

On average, students in single-sex schools continue to outperform those in co-ed schools.

Girls in girls' schools continue to perform better than students in co-ed schools across all schools and when looking at independent schools only.

Overall, there is an increase in the weighted average point score for all students, although boys in independent boys' schools have remained static.

All students in co-ed schools have seen the biggest improvement since 2023-2024 with 0.5%.

N.B. An analysis of UCAS application data will be added to this report in the coming months.