

Uptake of GCE A level subjects 2023

Statistics Report Series No. 141

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04 July 2024



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How to cite this publication

Miranda, A., & Gill, T. (2024). *Uptake of GCE A level subjects 2023*. Statistics Report Series No. 141. Cambridge University Press & Assessment.

Introduction

This report is focused on the uptake of A level subjects in England in 2023. Uptake in an A level subject is defined as the number or percentage of students at the end of Key Stage 5 (who have entered for at least one AS or A level) taking the subject.

This report was produced using publicly available data from the Department for Education's (DfE) "Find and compare schools in England" service¹. The dataset consisted of Key Stage 5 (KS5) results of all subjects provided by each school in England. Other school information, such as schools' sex composition, admissions policy, and the number of disadvantaged pupils at the end of KS5, was also available. Only schools that had at least one student who sat for at least one A level subject in the 2022/2023 academic year² were included.

In this report, A level uptake is presented by the following school classifications: school type, school attainment, school deprivation level, and school sex composition.

Results

Tables 1 to 4 present the distribution of schools within each of the different school classifications. The total number of schools is not identical in each table, due to small amounts of missing or suppressed data within each classification. In certain circumstances, DfE suppressed some school data values to protect confidentiality and minimise identification risks. This usually happens when the measure covers only five or fewer students³.

School type

A levels are taught at several different types of school. In line with the uptake report for 2017 and 2022 (Gill, 2018; Lim & Gill, 2023), schools were assigned a school type based on their admissions policy and institution type as recorded in the dataset.

In this report, schools and colleges were classified into ten different school types: Academy (non-selective in highly-selective area (HSA)), Academy (other non-selective), Academy (selective), Academy (sixth form), Further Education (FE) College, Independent school, Sixth form college, Non-selective in HSA, Other non-selective, and Selective. Other non-maintained schools, such as special schools, were excluded.

Table 1 presents the number and percentage of students and schools in each school type.

School attainment

Each school's ability or attainment level was derived based on the mean points score of their candidates' best three A level subjects, which was a variable readily available in the DfE dataset. The calculation taken to construct this variable is explained in greater detail by DfE (2018) but, in essence, this score is calculated for each student by first allocating points

¹ This can be accessed here: <https://www.find-school-performance-data.service.gov.uk/>

² The dataset also included information on some results from earlier academic years. If a school only had results achieved between January 2021 and August 2022, they were not included in this report, as no A level candidate count was published for these schools; hence, it was not possible to calculate the uptake percentages.

³ The applied suppression rule was explained in the "abbreviations" file that accompanied the dataset. As stated in the file, different measures might have different rules applied.

Table 1. A level students and schools, by school type.

School type	N students	% students	N schools	% schools
Academy (non-selective in HSA)	8287	2.8	123	4.7
Academy (other non-selective)	109802	37.7	1259	48.2
Academy (selective)	22721	7.8	140	5.4
Academy (sixth form)	26218	9.0	61	2.3
FE college	23012	7.9	124	4.8
Independent school	36023	12.4	521	20.0
Non-selective in HSA	1156	0.4	19	0.7
Other non-selective	27164	9.3	299	11.5
Selective	3170	1.1	20	0.8
Sixth form college	34016	11.7	44	1.7
Total	291569	100.0	2610	100.0

to grades such that A* = 60 points, A = 50 points, ..., and U = 0 points (DfE, 2018, p.26). Then, the points score for each student's best three A levels are added together and summed across a school. This total is then divided by the number of A level students in the school, and further divided by three to arrive at the mean points score per entry. For more details about the calculation, see DfE (2018, p.29).

Given that this is a school-level average, there would be some students who obtained high grades in a low attainment school, and some who obtained low grades in a high attainment school. However, a high attainment school will have more high-attaining students than a low attainment school, which has implications for uptake and teaching.

Table 2. School attainment/ability group. Values for minimum, maximum and mean are calculated based on candidates' average points per entry.

Attainment group	Schools	Students	Minimum	Maximum	Mean
Low	811	72149	4.1	31.1	26.3
Medium	811	104401	31.1	36.6	33.9
High	810	113159	36.6	55.9	41.3
Total	2432	289709	-	-	-

School deprivation level

Each school's deprivation level was derived based on the percentage of disadvantaged⁴ students in the school at the end of KS5. This measure was used to categorise schools into three equally-sized groups, representing low, medium, and high deprivation. Table 3 presents the number of schools in each group and the minimum, maximum and mean percentage of disadvantaged candidates for each group.

Some schools had no recorded value for this measure (mostly independent schools) and quite a few schools had a suppressed value due to the rule applied by DfE. These schools

⁴ Defined as those who attract pupil premium funding: that is, pupils claiming free school meals at any point in the last six years, and pupils in care, or who left care through adoption or another formal route.

were all excluded from this categorisation.

Table 3. School deprivation group. Values for minimum, maximum and mean are calculated based on the percentage of disadvantaged candidates within a school.

Deprivation group	Schools	Students	Minimum	Maximum	Mean
Low	530	101139	2.7	11.1	7.5
Medium	509	73332	11.1	20.4	15.3
High	520	53301	20.4	83.3	33.4
Total	1559	227772	-	-	-

School sex composition

School sex composition⁵ was recorded for each school in the DfE dataset. Table 4 shows the numbers and percentages of different types of schools.

Table 4. A level students and schools, by school sex.

School sex	N schools	% schools	N students	% students
Boys' School	67	2.6	7241	2.5
Girls' School	192	7.4	14518	5.0
Mixed School	2351	90.1	269810	92.5
Total	2610	100.0	291569	100.0

Mean number of A levels taken

Tables 5-8 show the mean number of A levels taken by students, according to the different school classifications described above. For example, Table 5 shows that students in selective academies took on average 3.1 A levels, compared with the students in non-selective schools in highly-selective areas, who took on average only 2.3 A levels.

Table 6 shows that students in the high attainment school group took on average 2.9 A levels, compared with those in the low attainment school group, in which students took on average 2.4 A levels. Table 7 shows that students from the low deprivation school group took on average 2.7 A levels, compared with those from the high deprivation school group, in which students took on average 2.5 A levels. Table 8 shows that at girls' schools and boys' schools, students took on average 3 A levels, compared with 2.6 A levels at mixed schools.

⁵ The word 'sex' is used throughout the report to describe the different types of schools as it best reflects the admission policy at the time of data collection, and is consistent with terms used by DfE in their reports.

Table 5. Mean number of A levels taken by school type.

School type	Total AL entries	Total no. of students	Mean ALs taken
Academy (non-selective in HSA)	18850	8287	2.3
Academy (other non-selective)	290319	109802	2.6
Academy (selective)	69800	22721	3.1
Academy (sixth form)	66781	26218	2.5
FE college	57705	23012	2.5
Independent school	105235	36023	2.9
Non-selective in HSA	2625	1156	2.3
Other non-selective	71438	27164	2.6
Selective	9905	3170	3.1
Sixth form college	86972	34016	2.6

Table 6. Mean number of A levels taken by attainment group.

Attainment group	Total AL entries	Total no. of students	Mean ALs taken
Low	174612	72149	2.4
Medium	277266	104401	2.7
High	324844	113159	2.9

Table 7. Mean number of A levels taken by deprivation group.

Deprivation group	Total AL entries	Total no. of students	Mean ALs taken
Low	277803	101139	2.7
Medium	188216	73332	2.6
High	135028	53301	2.5

Table 8. Mean number of A levels taken by school sex composition.

School sex	Total AL entries	Total no. of students	Mean ALs taken
Boys' School	21797	7241	3.0
Girls' School	42971	14518	3.0
Mixed School	714862	269810	2.6

Uptake of individual A level subjects

The uptake of individual A level subjects is presented in Tables 9 to 12, according to the school classifications described in Tables 1 to 4. Subjects with overall uptake of less than 1% are not included. In each table, subjects are ordered by overall uptake (highest first). Thus, Mathematics had the highest level of uptake, being taken by 28.3% of A level students in mixed schools, 57.9% of students in boys' schools, and 35% of students in girls' schools.

In boys' schools, Mathematics was the most popular subject (57.9% of students from boys' schools), whilst Economics was the second most popular (31.1% of students from boys'

schools). In girls' schools, Biology was the most popular subject (35.8% of students from girls' schools), whilst Mathematics was the second most popular (35% of students from girls' schools).

Table 9. Uptake of individual subjects by school sex composition (percentage of A level students at the end of KS5).

Subject	Boys' School	Girls' School	Mixed School	Overall uptake
Mathematics	57.9	35.0	28.3	29.3
Psychology	9.9	29.5	26.3	26.1
Biology	19.7	35.8	21.8	22.4
Chemistry	28.5	32.3	17.5	18.5
Sociology	2.8	10.0	15.9	15.3
History	18.9	16.4	14.8	15.0
Business Studies: Single	9.2	6.9	14.3	13.8
Economics	31.1	13.0	12.3	12.8
Geography	11.4	12.7	11.8	11.8
Physics	25.3	10.2	11.5	11.7
English Literature	9.2	17.5	11.1	11.4
Government and Politics	10.8	9.6	6.7	6.9
Computer Studies / Computing	8.4	3.1	5.9	5.9
Religious Studies	5.8	8.7	4.8	5.0
Media / Film / TV Studies	0.6	1.7	5.2	4.9
Law	0.4	1.0	5.1	4.7
Mathematics (Further)	15.4	5.8	4.4	4.7
Art and Design (Fine Art)	3.0	6.1	4.6	4.7
English Language	1.6	2.4	4.6	4.4
Physical Education / Sports Studies	2.9	2.3	4.2	4.1
Art and Design (Photography)	0.6	1.7	3.6	3.4
Drama and Theatre Studies	1.7	4.0	2.8	2.8
Design and Technology (Product Design)	3.7	1.5	2.8	2.7
Spanish	2.7	4.3	2.4	2.5
Film Studies	0.4	0.5	2.5	2.4
English Language and Literature	1.4	1.0	2.4	2.3
French	3.1	4.1	2.0	2.2
Art and Design	0.9	2.4	1.9	1.9
Art and Design (Graphics)	0.3	0.5	1.9	1.8
Classical Civilisation	0.8	2.9	1.2	1.3
Logic / Philosophy	2.7	1.0	1.2	1.3
Music	1.7	2.0	1.2	1.2
Art and Design (Textiles)	0.0	1.4	1.1	1.1

Table 10. Uptake of individual subjects by school type (percentage of A level students at the end of KS5). The abbreviation NSHSA represents 'Non-selective in highly selective areas'; ONS represents 'Other non-selective'; S represents 'Selective'; and SF represents 'Sixth form'.

Subject	Academy (NSHSA)	Academy (ONS)	Academy (S)	Academy (SF)	FE college	Ind. school	NSHSA	ONS	Selective	Sixth form
Mathematics	16.7	27.8	47.2	24.8	18.8	42.1	17.9	26.7	47.5	23.4
Psychology	27.0	28.1	24.6	26.3	28.8	18.6	33.1	26.9	22.8	25.4
Biology	17.2	22.8	35.0	20.2	16.8	22.5	19.3	22.0	34.3	19.0
Chemistry	11.0	17.1	33.7	15.9	11.8	23.6	14.0	17.2	31.3	15.5
Sociology	20.7	17.5	7.0	16.5	23.9	1.9	23.0	19.1	8.5	17.2
History	15.4	15.9	16.2	12.8	12.5	15.7	13.3	16.3	15.3	12.6
Business Studies: Single	12.9	14.1	10.9	14.5	15.9	13.7	14.0	11.8	10.0	15.2
Economics	5.4	11.6	18.2	10.5	7.4	21.9	2.9	12.8	20.9	10.0
Geography	13.3	13.5	13.2	9.0	8.5	11.8	14.1	12.4	13.4	8.8
Physics	7.3	11.6	19.1	9.3	7.0	16.6	6.1	10.8	21.1	8.5
English Literature	11.4	11.9	13.0	9.3	9.6	13.2	12.2	13.1	13.3	7.8
Government and Politics	4.6	6.2	8.6	5.9	6.0	10.2	5.1	7.4	7.6	6.2
Computer Studies / Computing	2.4	6.3	7.5	6.4	5.0	3.8	3.5	6.3	6.1	6.2
Religious Studies	5.3	5.3	5.3	2.9	2.7	7.3	5.3	5.8	5.7	3.7
Media / Film / TV Studies	8.1	5.3	1.9	5.3	8.4	0.7	7.3	5.8	2.8	5.7
Law	3.4	3.3	1.7	9.7	12.3	0.2	3.2	3.0	1.6	9.5
Mathematics (Further)	1.5	3.9	8.7	4.2	1.8	10.0	0.8	3.6	9.1	3.3
Art and Design (Fine Art)	4.8	4.5	3.6	4.2	5.4	6.3	5.6	4.3	4.6	4.2
English Language	2.8	4.6	3.0	5.3	6.8	1.5	1.7	4.9	0.6	6.0
Physical Education / Sports Studies	3.0	4.3	4.4	4.1	2.8	5.1	2.9	3.4	6.0	3.6
Art and Design (Photography)	6.4	3.3	0.7	3.6	4.6	2.9	5.7	3.8	0.7	4.4
Drama and Theatre Studies	2.4	2.7	2.4	2.5	2.5	4.9	1.7	2.6	1.2	2.5
D&T (Product Design)	3.5	3.6	3.1	0.3	0.4	3.7	3.1	3.4	4.8	1.0
Spanish	1.5	2.4	2.9	2.0	1.6	4.4	0.5	2.2	1.6	2.3
Film Studies	2.8	1.9	0.9	3.4	5.4	0.6	3.5	2.0	1.8	4.2
English Language and Literature	3.2	2.2	0.9	2.8	3.6	0.6	1.4	1.5	1.6	4.5

Table 10. Uptake of individual subjects by school type (percentage of A level students at the end of KS5). *(continued)*

Subject	Academy (NSHSA)	Academy (ONS)	Academy (S)	Academy (SF)	FE college	Ind. school	NSHSA	ONS	Selective	Sixth form
French	1.0	1.9	3.1	1.6	1.1	4.3	0.7	1.8	3.4	1.8
Art and Design	2.7	2.0	1.3	1.5	1.4	2.2	1.5	2.7	2.0	1.6
Art and Design (Graphics)	2.4	1.1	0.3	3.4	3.2	0.7	0.3	1.3	0.2	4.2
Classical Civilisation	0.3	0.5	1.5	1.7	1.7	2.6	0.0	0.7	3.2	2.0
Logic / Philosophy	0.4	0.6	1.2	2.3	1.8	1.6	0.9	1.2	2.6	1.8
Music	0.5	1.2	1.7	0.8	0.4	2.6	0.1	1.0	2.0	0.9
Art and Design (Textiles)	1.4	0.7	0.2	1.8	1.6	1.3	0.7	0.9	0.4	2.2

Table 11. Uptake of individual subjects by school attainment (percentage of A level students at the end of KS5).

Subject	Low	Medium	High
Mathematics	20.7	25.6	38.4
Psychology	28.4	27.7	23.2
Biology	19.2	21.5	25.4
Chemistry	13.8	16.4	23.6
Sociology	20.3	17.4	10.2
History	13.2	15.3	15.9
Business Studies: Single	14.5	15.2	12.3
Economics	8.2	11.4	17.1
Geography	9.6	12.7	12.6
Physics	8.5	10.7	14.9
English Literature	10.5	11.0	12.3
Government and Politics	5.3	6.4	8.5
Computer Studies / Computing	5.5	6.4	5.7
Religious Studies	4.0	5.0	5.7
Media / Film / TV Studies	6.7	5.6	3.0
Law	7.0	5.7	2.5
Mathematics (Further)	2.1	3.4	7.8
Art and Design (Fine Art)	4.8	4.4	4.8
English Language	4.7	5.4	3.4
Physical Education / Sports Studies	2.8	4.8	4.3
Art and Design (Photography)	4.6	3.6	2.5
Drama and Theatre Studies	2.3	2.8	3.3
Design and Technology (Product Design)	2.5	2.8	2.8
Spanish	1.7	2.3	3.3
Film Studies	3.1	2.8	1.6
English Language and Literature	3.1	2.2	1.8
French	1.1	1.9	3.1
Art and Design	2.1	2.0	1.7
Art and Design (Graphics)	2.1	2.0	1.4
Classical Civilisation	0.7	1.0	1.9
Logic / Philosophy	1.0	1.0	1.6
Music	0.5	1.2	1.8
Art and Design (Textiles)	1.1	1.1	1.1

Table 12. Uptake of individual subjects by school deprivation (percentage of A level students at the end of KS5).

Subject	Low	Medium	High
Mathematics	29.6	24.8	26.1
Psychology	26.0	27.8	28.7
Biology	23.2	21.1	22.5
Chemistry	18.1	16.3	19.2
Sociology	14.5	18.9	21.3
History	15.6	14.3	13.0
Business Studies: Single	15.0	13.6	12.4
Economics	12.5	10.0	12.3
Geography	13.8	10.8	7.5
Physics	12.3	9.8	9.0
English Literature	10.8	10.8	11.8
Government and Politics	6.8	5.8	7.0
Computer Studies / Computing	6.3	5.9	6.2
Religious Studies	4.4	4.4	5.4
Media / Film / TV Studies	5.3	5.9	5.4
Law	4.4	7.3	6.3
Mathematics (Further)	4.8	3.3	2.9
Art and Design (Fine Art)	4.4	4.6	4.0
English Language	5.0	5.4	3.8
Physical Education / Sports Studies	5.5	3.3	1.5
Art and Design (Photography)	3.5	3.9	2.9
Drama and Theatre Studies	3.1	2.4	1.6
Design and Technology (Product Design)	3.1	2.0	1.8
Spanish	2.4	2.1	2.2
Film Studies	2.7	3.2	2.3
English Language and Literature	2.6	2.6	2.2
French	2.3	1.6	1.3
Art and Design	1.8	1.9	2.1
Art and Design (Graphics)	2.1	2.2	1.7
Classical Civilisation	1.4	1.2	0.6
Logic / Philosophy	1.6	1.1	0.9
Music	1.4	0.9	0.5
Art and Design (Textiles)	1.2	1.3	0.9

Subject areas

Tables 13 to 16 present the breakdown of A level entries into five broad subject areas, according to the school classifications described in Tables 1 to 4. Individual subjects were grouped into the five areas: Science/Mathematics, English, Languages, Arts, and Social Science/Humanities. Grouping subjects in this manner is not straightforward and the allocation of subject areas is debatable, so for consistency with previous reports (e.g., Lim & Gill, 2023; Gill, 2018) the classifications of Bell et al. (2005) were followed where possible. Subject areas assigned are listed in the Appendix.

These tables show the popularity of A level subject areas by school characteristics. For instance, Table 14 shows that 40.7% of all A level entries from high attainment schools are in the Science and Maths subject area, which was proportionally higher compared to medium and low attainment schools (32.2% and 29.3%, respectively).

Table 13. Total number of A level entries and percentage of entries for each subject area, by school type. The abbreviation NSHSA represents 'Non-selective in highly selective areas', and ONS represents 'Other non-selective'.

School type	Total AL entries	Arts	English	Lang.	Sci./ Maths	Social Sci.
Academy (NSHSA)	18850	14.7	8.7	1.7	25.0	49.9
Academy (ONS)	290319	9.7	8.1	2.4	34.0	45.9
Academy (selective)	69800	5.0	6.3	2.7	49.5	36.5
Academy (sixth form)	66781	12.2	7.8	1.9	33.0	45.1
FE college	57705	14.2	9.0	1.5	25.7	49.7
Independent school	105235	8.7	6.9	6.1	40.7	37.7
NSHSA	2625	12.1	7.5	1.3	27.2	52.0
Other non-selective	71438	9.9	8.4	2.4	33.0	46.3
Selective	9905	6.7	5.3	2.8	47.8	37.4
Sixth form college	86972	13.1	8.1	2.1	31.1	45.6

Table 14. Total number of A level entries and percentage of entries for each subject area, by school attainment group.

Attainment group	Total AL entries	Arts	English	Lang.	Sci./ Maths	Social Sci.
Low	174612	12.2	8.5	1.9	29.3	48.0
Medium	277266	10.9	8.1	2.3	32.2	46.5
High	324844	8.4	7.2	3.6	40.7	40.1

Table 15. Total number of A level entries and percentage of entries for each subject area, by school deprivation group.

Deprivation group	Total AL entries	Arts	English	Lang.	Sci./ Maths	Social Sci.
Low	277803	10.9	7.8	2.3	35.1	43.9
Medium	188216	11.1	8.3	2.0	32.3	46.3
High	135028	8.9	7.6	2.3	34.2	46.9

Table 16. Total number of A level entries and percentage of entries for each subject area, by school sex composition.

School sex	Total AL entries	Arts	English	Lang.	Sci./ Maths	Social Sci.
Boys' School	21797	3.8	4.6	3.8	51.7	36.1
Girls' School	42971	6.9	8.4	5.0	41.3	38.4
Mixed School	714862	10.5	7.9	2.6	34.2	44.8

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Appendix

Table 17. The classification of A level subjects into subject areas.

A level subject	Subject area
Accounting / Finance	Social Science
Ancient History	Social Science
Arabic	Languages
Art and Design	Arts
Art and Design (3D Studies)	Arts
Art and Design (Critical Studies)	Arts
Art and Design (Fine Art)	Arts
Art and Design (Graphics)	Arts
Art and Design (Photography)	Arts
Art and Design (Textiles)	Arts
Bengali	Languages
Biology	Science / Maths
Business Studies: Single	Social Science
Chemistry	Science / Maths
Chinese	Languages
Classical Civilisation	Social Science
Classical Greek	Languages
Computer Studies / Computing	Science / Maths
Dance	Arts
Design and Technology (Engineering)	Social Science
Design and Technology (Product Design)	Social Science
Design and Technology (Textiles Technology)	Social Science
Drama and Theatre Studies	English
Economics	Social Science
Electronics	Science / Maths
English Language	English
English Language and Literature	English
English Literature	English
Environmental Science	Science / Maths
Film Studies	Arts
French	Languages
Geography	Social Science
Geology	Science / Maths
German	Languages
Government and Politics	Social Science
Gujarati	Languages
History	Social Science
History of Art	Arts
Italian	Languages

Table 17. The classification of A level subjects into subject areas. *(continued)*

A level subject	Subject area
Japanese	Languages
Latin	Languages
Law	Social Science
Logic / Philosophy	Social Science
Mathematics	Science / Maths
Mathematics (Further)	Science / Maths
Mathematics (Statistics)	Science / Maths
Media / Film / TV Studies	Arts
Modern Greek	Languages
Modern Hebrew	Languages
Music	Arts
Music Technology	Arts
Other Classical Languages	Languages
Persian	Languages
Physical Education / Sports Studies	Arts
Physics	Science / Maths
Polish	Languages
Portuguese	Languages
Psychology	Social Science
Punjabi	Languages
Religious Studies	Social Science
Russian	Languages
Sociology	Social Science
Spanish	Languages
Turkish	Languages
Urdu	Languages