Uptake of GCSE subjects 2022

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Introduction

This report is focused on the uptake of GCSE subjects in England in 2022. Uptake in a GCSE subject is defined as the number or percentage of students at the end of Key Stage 4 (KS4) taking the subject.

This report was produced using publicly available data from the Department for Education's (DfE) "Find and compare schools in England" service[1]. The dataset consisted of KS4 results in 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 KS4 were also available. Only GCSEs (9-1) full course (both single and double award) were counted for this report.

In this report, GCSE 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 students[2].

School type

GCSE qualifications are taught at several different types of school. In line with the uptake reports for 2019 and onwards (e.g., Gawedzka & Gill, 2022), schools were assigned a school type based on their admissions policy and institution type as recorded in the dataset.

In this report, schools were classified into seven different school types: Academy (non-selective in highly selective area (HSA)), Academy (other non-selective), Academy (selective), Independent school, Non-selective in highly selective area, 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.

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

[2] 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. GCSE students and schools, by school type.

School type	N students	% students	N schools	% schools
Academy (non-selective in HSA)	30793	5.0	178	4.4
Academy (other non-selective)	393498	63.4	2223	55.1
Academy (selective)	23058	3.7	144	3.6
Independent	50026	8.1	803	19.9
Non-selective in HSA	5356	0.9	33	0.8
Other non-selective	115019	18.5	630	15.6
Selective	3065	0.5	20	0.5
Total	**620815**	**100.0**	**4031**	**100.0**

School attainment

Schools were ranked by their attainment at GCSE, based on the centre mean score per entry in the DfE[3] dataset. This score was used to divide schools into three equally sized groups, representing low, medium, and high attainment. Table 2 presents the number of schools and GCSE students in each group, and the minimum, maximum and mean points score for each group.

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	1320	198368	0.9	4.7	4.1
Medium	1319	237303	4.7	5.5	5.1
High	1320	184439	5.5	8.8	6.4
Total	**3959**	**620110**	-	-	-

School deprivation level

Each school's deprivation level was derived based on the percentage of disadvantaged[4] students in the school at the end of KS4. This measure was used to categorise schools into three equally-sized groups, representing low, medium, and high deprivation. Table 3 presents

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[3] Average points per entry is derived by converting each qualification awarded at KS4 into points and dividing the total by the number of qualifications for which a school was entered. For single award GCSEs, points were equal to the grade (grade 9 = 9 points, etc.). For double award GCSEs graded 99 – 11, points were as follows: 99 = 18, 98 = 17, ..., 21 = 3, 11 = 2. Each double award GCSE was given a weight of two, representing two GCSE entries when calculating the average points per entry. The DfE did not publish the grades for entries that were impacted by Covid. Hence, for this calculation, only those entries without Covid-impacted grades are included. However, these Covid-impacted entries are still included in the calculation for uptake of the individual subjects.

[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.

the number of schools in each group and the minimum, maximum and mean percentage of disadvantage 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 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	1170	228376	0.0	19.0	12.7
Medium	991	172023	20.0	31.0	25.0
High	1067	170390	32.0	96.0	44.1
Total	**3228**	**570789**	**-**	**-**	**-**

School sex composition

School sex composition[5] was recorded for each school in the DfE dataset. Table 4 shows the numbers and percentages of different types of schools.

Table 4. GCSE students and schools, by school sex.

School sex	N schools	% schools	N students	% students
Boys' School	226	5.6	28370	4.6
Girls' School	369	9.2	43802	7.1
Mixed School	3436	85.2	548643	88.4
Total	**4031**	**100.0**	**620815**	**100.0**

Mean number of GCSEs taken

Tables 5-8 show the mean number of GCSEs taken by students, according to the different school classifications described above. For example, Table 5 shows that students in selective academies took on average 9.8 GCSEs, compared with the students in independent schools, who took on average only 4.6 GCSEs. This observation likely reflects that independent schools have a higher uptake of non-accredited qualifications (e.g., some IGCSEs/International GCSEs).[6]

Table 6 shows that students in the high attainment school group took on average 7.5 GCSEs, compared with those in the low attainment school group, in which students took on average 6.8 GCSEs. Table 7 shows that students in the low deprivation school group took on average 8.1 GCSEs, compared with students in the high deprivation school group, in which students

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[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.

[6] However, we can't know this for certain, because these non-accredited qualifications are not included in the DfE data.

Table 5. Mean number of GCSEs taken by school type.

School type	Total GCSE entries	Total no. of students	Mean GCSEs taken
Academy (non-selective in HSA)	221495	30793	7.2
Academy (other non-selective)	2913879	393498	7.4
Academy (selective)	224999	23058	9.8
Independent	229509	50026	4.6
Non-selective in HSA	38079	5356	7.1
Other non-selective	870228	115019	7.6
Selective	30068	3065	9.8

took on average 6.9 GCSEs. Table 8 shows that at girls' schools, students took on average 7.9 GCSEs, compared with 7.7 GCSEs at boys' schools and 7.2 GCSEs at mixed schools.

Table 6. Mean number of GCSEs taken by attainment group.

Attainment group	Total GCSE entries	Total no. of students	Mean GCSEs taken
Low	1356973	198368	6.8
Medium	1783098	237303	7.5
High	1387290	184439	7.5

Table 7. Mean number of GCSEs taken by deprivation group.

Deprivation group	Total GCSE entries	Total no. of students	Mean GCSEs taken
Low	1850195	228376	8.1
Medium	1267333	172023	7.4
High	1181220	170390	6.9

Table 8. Mean number of GCSEs taken by school sex composition.

School sex	Total GCSE entries	Total no. of students	Mean GCSEs taken
Boys' School	218456	28370	7.7
Girls' School	344333	43802	7.9
Mixed School	3965468	548643	7.2

Uptake of individual GCSE subjects

The uptake of individual GCSE 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, English Language had the highest level of uptake, being taken by 95.3% of GCSE students in mixed schools, 89% of students in boys' schools, and 89.7% of students in girls' schools.

It is expected that most students take core subjects, such as English, Mathematics and sci-

ence. However, there are alternatives to GCSEs in these subjects, such as (non-accredited) IGCSE/International GCSEs, BTECs and Cambridge Nationals, that are not included in these tables, so the percentages for these subjects are reduced. For example, as shown in Table 10, only 42.7% of the GCSE students in independent schools took English Language, compared to 99.1% of students in non-selective academies in highly selective area. For a detailed analysis of uptake of alternative qualifications in English schools see Gill (2016).

Table 9. Uptake of individual subjects by school sex composition (percentage of students at the end of KS4).

Subject	Boys' School	Girls' School	Mixed School	Overall uptake
English Language	89.0	89.7	95.3	94.6
Mathematics	85.7	86.2	94.7	93.7
English Literature	86.5	88.7	93.8	93.1
Science: Double Award	43.7	48.8	70.1	67.4
Geography	46.2	44.3	44.4	44.5
History	42.1	41.6	44.7	44.3
Religious Studies	44.8	55.9	33.4	35.5
Biology	41.9	39.6	25.1	26.9
Chemistry	42.3	39.1	24.6	26.5
Physics	41.8	38.5	24.7	26.4
French	23.7	28.7	19.1	20.0
Spanish	19.6	28.2	17.4	18.3
Business Studies: Single	19.3	14.3	15.9	16.0
Computer Studies / Computing	21.9	11.4	12.2	12.6
Design & Technology	20.3	9.5	12.3	12.5
Physical Education / Sports Studies	14.1	9.9	11.2	11.3
Art & Design (Fine Art)	10.1	13.7	10.7	10.8
Art & Design	4.0	8.0	9.1	8.8
Drama & Theatre Studies	6.7	14.3	8.2	8.6
D&T Food Technology	3.5	8.6	8.4	8.2
Art & Design (Photography)	2.1	2.8	6.9	6.3
German	11.1	9.3	5.1	5.7
Music	7.1	7.7	5.2	5.4
Media / Film / TV Studies	2.3	3.1	4.3	4.1
Sociology	1.0	5.5	4.0	4.0
Social Science: Citizenship	2.7	4.2	3.2	3.2
Statistics	4.3	1.3	3.1	3.0
Psychology	1.5	3.3	2.4	2.5
Art & Design (Textiles)	0.0	3.8	1.5	1.6
Latin	6.2	4.8	0.9	1.4
Art & Design (Graphics)	1.3	1.0	1.5	1.4
Art & Design (3D Studies)	0.9	0.3	1.4	1.3
Dance	0.1	2.8	1.3	1.3
Economics	5.3	1.3	0.8	1.1

Table 10. Uptake of individual subjects by school type (percentage of students at the end of KS4).

Subject	Academy (non-sel in HSA)	Academy (other non-sel)	Academy (sel)	Independent	Non-sel in HSA	Other non-sel	Selective
English Language	99.1	99.1	99.8	42.7	99.2	99.0	99.9
Mathematics	99.1	99.2	99.8	31.0	99.4	99.1	99.9
English Literature	98.0	98.0	99.6	37.6	98.2	97.7	99.4
Science: Double Award	77.2	73.6	17.0	22.7	77.1	74.0	17.7
Geography	46.5	45.5	54.7	31.5	40.5	43.7	57.8
History	45.2	47.0	49.9	17.6	44.4	45.5	48.9
Religious Studies	28.7	32.7	46.0	26.9	41.2	47.7	47.0
Biology	20.8	24.6	82.5	26.5	21.1	24.1	82.0
Chemistry	20.4	24.3	82.1	24.9	20.8	23.8	81.7
Physics	20.2	24.4	82.1	24.0	21.0	23.8	81.7
French	17.7	20.0	35.1	16.2	11.5	19.4	32.6
Spanish	14.2	18.2	30.8	15.6	16.5	18.0	27.6
Business Studies: Single	16.5	16.2	23.2	10.6	12.3	15.9	22.3
Computer Studies / Computing	9.0	12.1	25.4	11.0	15.2	12.7	24.5
Design & Technology	10.1	11.9	18.2	12.9	11.0	13.3	26.5
Physical Education / Sports Studies	9.7	10.6	17.3	14.5	6.1	11.3	18.3
Art & Design (Fine Art)	8.6	11.0	12.6	12.3	6.9	10.1	12.6
Art & Design	9.9	8.7	5.2	7.0	11.8	10.0	10.7
Drama & Theatre Studies	7.5	8.0	12.4	12.8	5.7	8.4	8.9
D&T Food Technology	9.0	8.3	7.8	5.1	5.3	9.2	8.9
Art & Design (Photography)	9.0	7.0	1.3	2.4	6.5	6.4	0.0
German	2.4	5.0	23.0	5.2	1.8	5.3	29.1
Music	3.5	4.9	10.6	8.5	3.0	5.5	10.8
Media / Film / TV Studies	5.5	4.2	1.9	0.9	5.0	5.2	2.8
Sociology	5.0	4.1	2.1	0.1	2.9	5.4	0.0
Social Science: Citizenship	5.8	3.0	1.2	2.7	4.0	3.8	0.1

Table 10. Uptake of individual subjects by school type (percentage of students at the end of KS4). *(continued)*

Subject	Academy (non-sel in HSA)	Academy (other non-sel)	Academy (sel)	Independent	Non-sel in HSA	Other non-sel	Selective
Statistics	5.9	3.2	3.5	1.0	5.5	2.3	3.3
Psychology	2.4	2.5	3.6	1.1	5.9	2.5	0.4
Art & Design (Textiles)	1.9	1.5	1.2	1.8	1.0	1.9	1.4
Latin	0.1	0.4	5.7	10.4	0.0	0.3	9.1
Art & Design (Graphics)	1.7	1.5	1.1	0.6	1.5	1.4	0.0
Art & Design (3D Studies)	1.5	1.3	0.2	1.3	2.4	1.3	0.0
Dance	2.4	1.3	1.3	0.9	0.5	1.5	0.6
Economics	0.7	0.8	7.3	0.7	1.0	0.9	2.0

Table 11. Uptake of individual subjects by school attainment (percentage of students at the end of KS4).

Subject	Low	Medium	High
English Language	98.6	98.8	85.2
Mathematics	98.6	98.8	82.1
English Literature	96.9	97.6	83.7
Science: Double Award	77.7	73.4	48.8
Geography	41.7	45.9	45.7
History	45.8	46.6	39.9
Religious Studies	26.5	36.3	44.2
Biology	19.4	24.8	37.8
Chemistry	18.9	24.4	37.3
Physics	19.0	24.5	37.0
French	14.7	20.3	25.4
Spanish	14.1	17.9	23.3
Business Studies: Single	10.6	18.3	18.7
Computer Studies / Computing	10.0	12.6	15.2
Design & Technology	10.1	12.8	14.6
Physical Education / Sports Studies	5.9	12.5	15.5
Art & Design (Fine Art)	10.7	10.4	11.6
Art & Design	10.1	8.8	7.4
Drama & Theatre Studies	5.8	8.7	11.6
D&T Food Technology	7.3	9.0	8.2
Art & Design (Photography)	8.3	6.8	3.7
German	2.6	4.8	10.2
Music	3.2	5.2	8.2
Media / Film / TV Studies	3.3	4.9	3.9
Sociology	3.6	4.9	3.2
Social Science: Citizenship	3.2	3.6	2.7
Statistics	3.6	3.3	2.1
Psychology	2.4	2.6	2.3
Art & Design (Textiles)	1.3	1.7	1.8
Latin	0.1	0.2	4.3
Art & Design (Graphics)	1.4	1.6	1.3
Art & Design (3D Studies)	1.7	1.3	0.7
Dance	1.0	1.4	1.5
Economics	0.2	0.9	2.2

Table 12. Uptake of individual subjects by school deprivation (percentage of students at the end of KS4).

Subject	Low	Medium	High
English Language	99.3	99.1	98.9
Mathematics	99.4	99.2	99.0
English Literature	98.4	98.0	97.5
Science: Double Award	62.8	74.3	79.7
Geography	49.0	45.1	41.5
History	47.1	46.9	45.9
Religious Studies	39.3	34.9	33.4
Biology	35.8	23.9	18.0
Chemistry	35.6	23.6	17.6
Physics	35.7	23.7	17.6
French	24.0	19.0	16.8
Spanish	20.1	16.5	18.4
Business Studies: Single	22.0	15.2	10.2
Computer Studies / Computing	15.1	12.1	10.1
Design & Technology	15.8	11.8	8.5
Physical Education / Sports Studies	16.2	10.0	5.0
Art & Design (Fine Art)	11.2	10.8	10.0
Art & Design	8.0	9.0	10.1
Drama & Theatre Studies	10.7	7.8	5.4
D&T Food Technology	10.7	8.5	5.6
Art & Design (Photography)	5.0	7.7	7.9
German	9.5	4.3	2.1
Music	7.0	4.7	3.1
Media / Film / TV Studies	5.3	4.8	2.8
Sociology	4.2	4.2	4.5
Social Science: Citizenship	2.6	3.4	4.1
Statistics	2.7	3.8	3.3
Psychology	2.7	2.7	2.2
Art & Design (Textiles)	1.8	1.5	1.5
Latin	1.1	0.3	0.2
Art & Design (Graphics)	1.7	1.2	1.5
Art & Design (3D Studies)	1.1	1.3	1.5
Dance	1.8	1.4	0.7
Economics	1.8	0.7	0.7

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