


Uptake of GCSE subjects 2021

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Introduction

This report is focused on the uptake of GCSE subjects in England in 2021. 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" service¹. The dataset consisted of KS4 entry numbers in all GCSE subjects in England. Other school information, such as schools' sex composition, school type, and admissions policy, was also available. However, some data (available in previous years) was not available in the 2021 dataset, including GCSE grades achieved and the percentage of disadvantaged students in each school. This data was not available because the DfE did not want schools to be held to account for their students' performance in 2021 due to the disruption in learning caused by the Covid-19 pandemic. This meant that we were not able to produce the tables in this report with breakdowns by school level attainment or deprivation using 2021 data (Tables 2, 3, 6, 7, 11, and 12). Instead we decided to use data (for these tables only) from the 2019 dataset. We assumed that for most schools, the average attainment and the percentage of disadvantaged students would not change significantly in two years and so the 2019 data would be a reasonable proxy for 2021. Only GCSEs (9-1) full course (both single and double award) were counted for 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 missing or suppressed data within each classification. In certain circumstances, DfE suppressed some school data values to protect the confidentiality and minimise identification risks. This usually happens when the measure covers only five or fewer students².

School type

GCSE qualifications are taught at several different types of school. In line with the uptake reports for 2019 (e.g., Gawedzka & Gill, 2021), 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.

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)	29906	4.9	177	4.4
Academy (other non-selective)	380582	62.2	2160	53.9
Academy (selective)	22570	3.7	143	3.6
Independent	49804	8.1	796	19.9
Non-selective in HSA	5279	0.9	33	0.8
Other non-selective	120920	19.8	674	16.8
Selective	3167	0.5	21	0.5
Total	612228	100.0	4004	100.0

School attainment

Schools were ranked by their attainment at GCSE, based on the centre mean score per entry³ in the DfE dataset. As noted above, there was no data on school performance in the 2021 dataset, so we retrieved school performance data from the 2019 dataset instead. 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.

It is worth noting that the number of schools and students in Table 2 was substantially lower than in Table 1. This is mainly because we used data from 2019 to generate the results in Table 2 and many schools in the 2021 dataset had no performance data in 2019⁴.

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	1235	185148	1.2	4.4	3.9
Medium	1234	221941	4.4	5.2	4.8
High	1234	172048	5.2	8.9	6.1
Total	3703	579137	-	-	-

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 There were several different reasons for this, including the school having no GCSE entries in 2019, having very few GCSE entries in 2019 so that grades achieved were suppressed, or the school opening after 2019.

School deprivation level

Each school's deprivation level was derived based on the percentage of disadvantaged⁵ students in the school at the end of KS4. As noted above, there was no school level information in the 2021 dataset, so we retrieved this data from the 2019 dataset instead. 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 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	1040	200270	0.0	18.0	12.0
Medium	1014	176182	19.0	32.0	24.9
High	952	154658	33.0	85.0	45.5
Total	3006	531110	-	-	-

School sex composition

School sex composition⁶ 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	220	5.5	27523	4.5
Girls' School	368	9.2	43658	7.1
Mixed School	3416	85.3	541047	88.4
Total	4004	100.0	612228	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 9.7 GCSEs, compared with the students in independent schools who took on average only 4.4 GCSEs. This observation likely reflects that

⁵ 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.

⁶ 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.

independent schools have a higher uptake of non-accredited qualifications (e.g., some IGCSEs/International GCSEs).⁷

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)	212373	29906	7.1
Academy (other non-selective)	2774320	380582	7.3
Academy (selective)	218355	22570	9.7
Independent	218607	49804	4.4
Non-selective in HSA	34991	5279	6.6
Other non-selective	894301	120920	7.4
Selective	30590	3167	9.7

Table 6 shows that students took on average 7.3 GCSEs in schools in the high attainment group, compared with students in schools in the low attainment group who took on average 6.7 GCSEs. Table 7 shows that students in schools in the low deprivation group took on average 8 GCSEs, compared with students in schools in the high deprivation group who took on average 6.8 GCSEs. Table 8 shows that at both girls' and boys' schools, students took on average 7.6 GCSEs, compared with 7.1 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	1245196	185148	6.7
Medium	1650759	221941	7.4
High	1261687	172048	7.3

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

Deprivation group	Total GCSE entries	Total no. of students	Mean GCSEs taken
Low	1609497	200270	8.0
Medium	1278603	176182	7.3
High	1055778	154658	6.8

⁷ However, we can't know this for certain, because these non-accredited qualifications are not included in the DfE data.

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	210193	27523	7.6
Girls' School	331636	43658	7.6
Mixed School	3841708	541047	7.1

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 94.2% of GCSE students in mixed schools, 89% of students in boys' schools, and 87.2% of students in girls' schools.

It is expected that most students take core subjects, such as English, Mathematics and science. 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 41.2% of the GCSE students in independent schools took English Language, compared to 98.1% of students in non-selective academies in highly selective areas. 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	87.2	94.2	93.4
Mathematics	85.5	84.9	94.4	93.3
English Literature	85.6	83.6	89.7	89.1
Science: Double Award	42.3	48.5	69.9	67.1
History	42.4	42.7	45.0	44.8
Geography	46.3	42.1	43.1	43.2
Religious Studies	40.7	51.7	31.2	33.1
Biology	44.1	39.2	24.9	26.8
Chemistry	44.5	38.6	24.7	26.5
Physics	44.0	38.3	24.6	26.4
French	23.9	28.5	19.1	20.0
Spanish	19.6	27.1	16.5	17.4
Business Studies: Single	18.8	13.4	15.2	15.3
Design & Technology	21.8	9.7	13.0	13.1
Computer Studies / Computing	20.7	10.2	12.1	12.3
PE / Sports Studies	13.8	9.4	11.4	11.3
Art & Design (Fine Art)	10.1	13.7	10.9	11.1
Art & Design	4.8	8.0	9.5	9.2
Drama & Theatre Studies	6.6	14.6	8.8	9.1
D&T Food Technology	3.0	8.2	8.1	7.9
Art & Design (Photography)	2.4	2.9	6.5	6.0
German	12.1	9.1	5.4	5.9
Music	6.9	8.3	5.4	5.6
Media / Film / TV Studies	2.5	2.9	4.6	4.4
Sociology	0.9	5.1	3.7	3.6
Social Science: Citizenship	1.1	3.7	2.5	2.5
Psychology	1.2	2.7	2.3	2.3
Statistics	2.2	0.9	1.8	1.8
Art & Design (Textiles)	0.0	3.6	1.6	1.7
Art & Design (Graphics)	1.3	1.3	1.5	1.5
Latin	6.2	5.0	0.8	1.4
Dance	0.1	2.7	1.3	1.4
Art & Design (3D Studies)	0.4	0.2	1.3	1.1
Economics	5.2	1.6	0.8	1.0

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	98.1	98.0	99.9	41.2	94.1	98.2	99.8
Mathematics	98.8	98.9	99.3	30.2	99.0	98.9	99.7
English Literature	94.0	93.4	99.8	36.8	83.2	93.6	99.6
Science: Double Award	77.0	73.3	16.3	21.5	76.8	74.3	18.4
History	46.1	47.3	51.1	17.0	44.2	46.3	53.4
Geography	43.2	44.6	53.5	30.5	39.8	42.0	52.5
Religious Studies	28.1	29.9	42.3	25.7	36.1	45.3	42.4
Biology	20.9	24.7	83.3	25.6	18.3	23.6	81.3
Chemistry	20.6	24.5	83.2	24.8	18.3	23.4	81.1
Physics	20.4	24.5	83.2	23.5	18.7	23.5	81.2
French	18.0	20.2	35.3	15.4	12.5	18.7	37.7
Spanish	14.2	17.1	33.5	15.2	12.1	17.1	25.1
Business Studies: Single	15.3	15.8	21.8	9.8	10.6	14.5	24.0
Design & Technology	11.6	12.8	18.7	13.0	10.2	13.5	25.0
Computer Studies / Computing	9.6	12.1	23.6	9.3	16.0	12.5	21.4
PE / Sports Studies	9.4	10.9	16.2	13.6	6.7	11.4	17.6
Art & Design (Fine Art)	9.4	11.2	13.2	12.7	6.9	10.2	12.9
Art & Design	9.6	9.0	5.4	7.1	12.4	10.8	10.7
Drama & Theatre Studies	8.1	8.7	13.1	12.8	6.4	8.8	8.2
D&T Food Technology	8.6	8.2	6.9	4.5	6.0	8.3	9.3
Art & Design (Photography)	9.6	6.5	1.4	2.2	6.1	6.2	0.1
German	2.6	5.5	22.0	4.8	1.6	5.4	25.6
Music	4.0	5.2	10.7	8.3	2.7	5.5	11.0
Media / Film / TV Studies	5.8	4.5	1.6	0.9	3.9	5.6	3.4
Sociology	4.1	3.9	1.2	0.1	2.0	4.9	0.0
Social Science: Citizenship	5.4	2.4	1.2	1.5	2.0	3.0	0.0

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
Psychology	2.5	2.4	3.1	1.1	4.6	2.1	0.0
Statistics	4.0	1.9	0.9	0.7	3.7	1.3	0.7
Art & Design (Textiles)	2.0	1.7	1.4	1.7	0.9	1.8	1.4
Art & Design (Graphics)	2.1	1.6	1.2	0.6	1.1	1.3	0.0
Latin	0.1	0.3	6.1	10.3	0.1	0.2	11.2
Dance	2.5	1.3	1.4	0.7	0.9	1.5	0.4
Art & Design (3D Studies)	1.5	1.2	0.1	1.3	1.7	1.1	0.0
Economics	0.8	0.8	7.3	0.7	1.3	0.7	1.5

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

Subject	Low	Medium	High
English Language	97.8	97.6	83.3
Mathematics	98.4	98.6	80.7
English Literature	91.0	93.5	81.1
Science: Double Award	78.1	72.6	47.2
History	45.8	47.1	40.2
Geography	40.5	44.6	44.3
Religious Studies	24.8	35.5	40.4
Biology	18.7	25.4	38.2
Chemistry	18.4	25.2	38.0
Physics	18.4	25.2	37.6
French	15.2	20.3	25.0
Spanish	14.0	16.5	22.4
Business Studies: Single	9.9	17.3	18.8
Design & Technology	10.6	13.8	15.2
Computer Studies / Computing	10.5	12.9	13.9
PE / Sports Studies	6.5	12.8	15.2
Art & Design (Fine Art)	10.3	11.2	11.4
Art & Design	10.8	8.7	7.9
Drama & Theatre Studies	6.5	9.4	12.2
D&T Food Technology	7.2	8.8	7.5
Art & Design (Photography)	7.8	6.4	3.5
German	2.6	6.0	10.0
Music	3.4	5.6	8.4
Media / Film / TV Studies	3.9	5.4	3.7
Sociology	3.4	4.8	2.7
Social Science: Citizenship	3.0	3.0	1.5
Psychology	2.1	2.7	1.9
Statistics	2.3	1.7	1.3
Art & Design (Textiles)	1.4	1.8	1.9
Art & Design (Graphics)	1.4	1.7	1.3
Latin	0.0	0.3	4.5
Dance	1.2	1.6	1.3
Art & Design (3D Studies)	1.7	1.1	0.7
Economics	0.3	0.7	2.3

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

Subject	Low	Medium	High
English Language	98.6	98.0	97.6
Mathematics	99.2	99.0	98.6
English Literature	95.1	93.7	92.1
Science: Double Award	61.3	74.8	78.8
History	48.2	46.9	46.2
Geography	47.7	44.6	39.5
Religious Studies	36.5	33.2	32.3
Biology	37.3	23.3	18.4
Chemistry	37.2	23.1	18.1
Physics	37.2	23.1	18.1
French	23.8	19.4	17.3
Spanish	19.5	15.5	17.7
Business Studies: Single	21.7	14.2	10.2
Design & Technology	16.9	13.2	8.5
Computer Studies / Computing	14.8	12.4	10.4
PE / Sports Studies	16.7	10.3	5.3
Art & Design (Fine Art)	11.5	11.7	8.9
Art & Design	8.6	8.5	11.2
Drama & Theatre Studies	11.4	8.4	6.4
D&T Food Technology	10.3	8.4	5.3
Art & Design (Photography)	5.0	6.9	7.2
German	10.4	4.8	2.3
Music	7.4	5.1	3.5
Media / Film / TV Studies	5.4	5.3	3.3
Sociology	3.4	4.4	4.5
Social Science: Citizenship	1.5	3.1	3.6
Psychology	2.4	2.2	2.5
Statistics	1.3	2.4	2.0
Art & Design (Textiles)	1.9	1.6	1.6
Art & Design (Graphics)	1.8	1.4	1.5
Latin	1.3	0.3	0.2
Dance	1.8	1.5	1.0
Art & Design (3D Studies)	0.8	1.3	1.4
Economics	1.7	0.6	0.8

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