

Uptake of GCSE subjects 2015

Statistics Report Series No.107

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April 2016

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Introduction

This report looks at the uptake of GCSE (and IGCSE) subjects in England in 2015. The data for these analyses were taken from the National Pupil Database (NPD). This is a database held by the Department for Education, consisting of results for all students in all subjects in schools and colleges in England, as well as pupil and school background characteristics such as age, gender, ethnicity and level of deprivation.

For the analysis of uptake at GCSE the Key Stage 4 (KS4) extract of the NPD was used, consisting of all students who were at the end of KS4 in 2015 (i.e. in year 11). Uptake in this report is defined as the percentage of these students taking a GCSE in the subject, and includes exams taken by these students in previous years. Only accredited IGCSEs were counted in this report as non-accredited qualifications are no longer included in the NPD extract.

Table 1 presents a breakdown of the number of GCSEs taken by students. This shows that around 20% took 9 GCSEs and around 20% took 10. The mean number of GCSEs taken was 8.3.

Table 1: Number of GCSEs taken (% of GCSE students)

Number of GCSEs	Percentage
1	1.3
2	1.1
3	2.0
4	3.3
5	5.1
6	7.5
7	10.5
8	14.2
9	20.2
10	20.6
11	10.5
12+	3.6
Mean no. taken	8.3
No. of candidates	590,238

Uptake of GCSEs in this report is presented by different student classifications: gender, school type, prior attainment, school gender and deprivation level. In the following tables the numbers of students in each of the classifications are presented.

School type

There are several different types of school where students study for GCSEs. For this report these were classified into five groups. Table 2 presents the number and percentage of GCSE students attending each school type.

Table 2: GCSE students by school type

School type	Number of students	Percent
Academy	262,584	44.5
Comprehensive	254,579	43.2
Grammar	9,668	1.6
Independent	49,854	8.5
Secondary Modern	13,158	2.2

Pupil attainment

Students were classified by their attainment at GCSE. GCSE grades were converted into scores (A* = 8, A= 7, B= 6 etc.) and a mean GCSE was calculated for each student, which was then used to divide students up into three approximately equally sized attainment groups: low, medium and high. Table 3 presents the number in each group as well as the mean, minimum and maximum value of mean GCSE for each group.

Table 3: GCSE students by attainment

Prior attainment group	Number of students	Minimum	Maximum	Mean
Low	193,411	1.0	4.5	3.4
Medium	197,631	4.5	5.7	5.1
High	196,374	5.8	8.0	6.6

Deprivation level

The level of deprivation that a student experiences was measured by the Income Deprivation Affecting Children Index (IDACI). This is a measure of the proportion of children in a very small geographical area (Lower Layer Super Output Area or LSOA) who live in families that are income deprived. It varies between 0 and 1, with 0 representing minimum deprivation and 1 maximum deprivation.

It should be noted that there was some missing data for this measure (almost 10% of students had no record). Students who did have a measure of deprivation were divided up into three equally sized groups. Table 4 presents the number of students and the mean, minimum and maximum IDACI values in each group.

Table 4: GCSE students by deprivation level

Deprivation Group	Number of students	Minimum	Maximum	Mean
Low	179,168	0.00	0.10	0.06
Medium	179,152	0.10	0.26	0.17
High	179,156	0.26	0.99	0.42

School gender

The school gender variable was determined by the female ratio (number of females over the total number of students) in the school. If this ratio was greater than 0.95, the school was considered to be a "Girls" school. If the female ratio was less than 0.05, then the school was designated a "Boys" school. The rest of the schools were considered "Mixed" schools. Table 5 shows the numbers and percentages of students attending the different types of schools.

Table 5: GCSE students by school gender

School gender	Number of students	Percent
Boys School	30,587	5.2
Girls School	45,223	7.7
Mixed School	514,428	87.2

Number of GCSEs taken

The number of GCSEs taken by students in each of the classifications is presented in Tables 6-9. For example, Table 6 shows that 21.5% of students in academies took 10 GCSEs, compared with 37.3% of students in grammar schools. In academies the mean number of GCSEs taken was 8.5, compared with 10.3 in grammar schools. Table 7 shows that 6.7% of students with low attainment took 10 GCSEs, compared with 31.1% of students with high attainment.

Table 6: Number of GCSEs taken, by school type (% of students)

Number of GCSEs	Academy	Comprehensive	Grammar	Independent	Secondary Modern
1	1.0	1.1	0.2	3.6	1.2
2	0.9	0.9	0.1	3.1	1.3
3	1.6	1.6	0.1	6.8	1.6
4	2.6	2.7	0.1	10.7	3.3
5	4.6	4.5	0.3	11.8	6.1
6	7.0	7.2	0.6	12.3	8.7
7	10.0	10.5	1.6	13.2	14.5
8	14.3	15.0	3.1	11.5	17.7
9	20.4	22.0	10.5	12.5	19.1
10	21.5	21.4	37.3	9.5	16.7
11	11.9	9.8	32.7	3.5	7.0
12+	4.2	3.2	13.4	1.3	2.9
Mean no. taken	8.5	8.4	10.3	6.5	8.0
No. of candidates	262,584	254,579	9,668	49,854	13,158

Table 7: Number of GCSEs taken, by attainment (% of students)

Number of GCSEs	Low	Medium	High
1	1.7	0.5	0.8
2	2.1	0.4	0.6
3	4.0	0.6	1.3
4	6.7	1.1	2.2
5	11.0	2.1	2.4
6	15.2	5.0	2.6
7	18.5	9.6	3.6
8	17.5	18.1	7.4
9	14.5	27.0	19.3
10	6.7	24.0	31.1
11	1.8	9.2	20.6
12+	0.3	2.4	8.2
Mean no. taken	6.8	8.7	9.4
No. of candidates	193,411	197,631	196,374

Table 8: Number of GCSEs taken, by deprivation level (% of students)

Number of GCSEs	Low	Medium	High
1	0.3	0.6	1.0
2	0.4	0.6	1.2
3	0.7	1.4	2.3
4	1.3	2.4	4.0
5	2.5	4.4	6.7
6	4.4	7.2	9.8
7	7.5	10.6	12.8
8	12.8	15.1	16.0
9	22.7	21.4	19.1
10	27.3	21.6	16.4
11	15.2	10.8	7.8
12+	4.9	3.9	2.9
Mean no. taken	9.1	8.5	7.9
No. of candidates	179,168	179,152	179,156

Table 9: Number of GCSEs taken, by school gender (% of students)

Number of GCSEs	Boys school	Girls school	Mixed school
1	1.1	1.2	1.3
2	1.4	1.0	1.1
3	2.7	2.1	2.0
4	5.2	2.9	3.2
5	5.9	4.1	5.2
6	6.8	6.0	7.7
7	8.5	7.0	10.9
8	9.8	9.7	14.9
9	13.7	18.5	20.8
10	23.2	26.0	20.0
11	15.9	16.4	9.7
12+	5.8	5.1	3.4
Mean no. taken	8.4	8.7	8.2
No. of candidates	30,587	45,223	514,428

Uptake of individual GCSE subjects

In the following tables the uptake of individual subjects is presented, broken down into the classifications outlined above. Subjects with an overall uptake level of less than 1% are not included. In each table the subjects are ordered by overall uptake (highest first). Thus, mathematics had the highest level of uptake, being taken by 92.6% of all GCSE students, 92.2% of males and 93.0% of females.

It is worth noting that the expectation is that virtually all pupils take some core subjects, such as English, mathematics and science. However, there are alternatives to GCSEs in these subjects which are increasingly popular, such as (unaccredited) IGCSEs, BTECs and OCR Nationals (particularly in science). This means that the percentages for these subjects are reduced somewhat in these tables. For a detailed analysis of uptake of alternative qualifications in English schools see Gill (2016).

Table 10: Uptake of individual subjects by gender (% of students)

Subject	Boys	Girls	All
Mathematics	92.2	93.0	92.6
English Literature	83.6	88.1	85.8
English Language	81.4	86.1	83.7
Science (Core)	60.2	62.9	61.5
Additional Science	49.5	53.4	51.4
Religious Studies	41.5	49.1	45.3
History	38.9	41.7	40.2
Geography	38.9	34.1	36.6
French	22.7	30.7	26.6
Biology	24.1	23.4	23.7
Chemistry	23.5	22.7	23.1
Physics	23.5	22.5	23.0
Physical Education/Sports Studies	24.4	12.8	18.7
Information & Communications Technology	19.5	14.9	17.2
Spanish	13.1	17.3	15.1
Art & Design	9.2	19.9	14.5
Business Studies: Single	14.4	10.7	12.6
Drama & Theatre Studies	9.1	15.0	12.0
English Language & Literature	12.9	9.2	11.0
German	9.1	9.7	9.4
Media/Film/TV Studies	8.9	8.8	8.8
Statistics	9.3	8.1	8.7
Art & Design (Fine Art)	5.7	11.8	8.7
D&T Resistant Materials	14.3	2.6	8.5
Music	6.8	8.0	7.4
D&T Food Technology	4.6	8.3	6.4
D&T Product Design	9.0	3.6	6.4
Computer Studies/Computing	9.0	1.7	5.4
D&T Graphic Products	6.6	4.1	5.4
D&T Textiles Technology	0.2	8.0	4.1
Further additional science	3.8	3.9	3.8
Art & Design (Photography)	2.8	4.6	3.7
Sociology	2.0	5.2	3.6
Social Science: Citizenship	3.3	3.7	3.5
Home Economics: Child Development	0.1	6.0	3.0
Psychology	1.6	3.7	2.7
Office Technology	2.5	2.2	2.4
Methods in Mathematics	2.2	2.0	2.1
Applications of Mathematics	2.1	2.0	2.1
Dance	0.3	3.7	2.0
Economics	2.1	1.0	1.6
General Studies	1.6	1.5	1.5
Home Economics: Food	1.0	1.9	1.4
Latin	1.4	1.4	1.4
Humanities: Single	1.4	1.3	1.4
D&T Electronic Products	2.4	0.2	1.3
Art & Design (Textiles)	0.1	2.5	1.3
Art & Design (Graphics)	1.4	1.1	1.3
Health & Social Care	0.1	2.3	1.2
Film Studies	1.2	1.1	1.1
Applied Engineering	2.0	0.2	1.1
Performing Arts	0.6	1.5	1.0

Table 11: Uptake of individual subjects by school type (% of students)

Subject	Academy	Comp.	Grammar	Independent	Secondary Modern
Mathematics	96.1	96.9	95.2	50.6	96.7
English Literature	87.4	86.9	98.0	69.2	87.3
English Language	87.4	86.7	98.2	45.8	87.3
Science (Core)	63.7	67.0	25.0	27.1	73.3
Additional Science	53.4	56.4	21.6	20.6	56.1
Religious Studies	43.5	49.4	50.9	32.9	43.1
History	40.7	39.0	55.5	42.5	34.5
Geography	36.3	35.1	53.8	43.7	31.0
French	26.8	25.1	41.7	33.3	17.6
Biology	24.3	20.3	75.1	31.3	14.7
Chemistry	23.8	19.9	74.9	28.6	13.9
Physics	23.8	19.9	75.0	27.8	13.8
Physical Education/Sports Studies	19.1	19.3	17.4	13.7	17.8
Information & Communications Technology	17.3	18.9	16.9	8.9	15.8
Spanish	14.6	13.9	31.3	22.4	12.2
Art & Design	14.5	15.2	10.1	11.4	15.7
Business Studies: Single	13.7	12.4	20.3	7.6	8.8
Drama & Theatre Studies	11.8	11.9	12.4	14.6	7.9
English Language & Literature	11.3	11.9	1.6	6.0	13.0
German	10.4	8.1	24.4	10.3	2.8
Media/Film/TV Studies	9.5	9.8	4.0	1.6	8.3
Statistics	9.3	8.4	9.0	4.1	19.9
Art & Design (Fine Art)	8.5	8.3	11.9	11.8	7.2
D&T Resistant Materials	8.1	8.7	7.2	9.9	10.1
Music	7.2	7.0	11.1	10.2	4.9
D&T Food Technology	6.9	6.9	6.4	1.6	6.8
D&T Product Design	6.9	6.2	10.0	4.0	5.2
Computer Studies/Computing	6.0	5.1	13.4	2.8	3.7
D&T Graphic Products	5.6	5.9	6.9	1.7	4.0
D&T Textiles Technology	4.2	4.4	4.4	1.6	3.2
Further additional science	4.0	4.4	2.1	1.0	3.5
Art & Design (Photography)	3.7	4.1	0.9	1.7	6.6
Sociology	3.7	4.2	1.0	0.2	3.9
Social Science: Citizenship	3.6	3.9	1.6	1.1	4.7
Home Economics: Child Development	3.4	3.3	.	0.4	2.5
Psychology	2.7	2.9	3.0	0.7	5.1
Office Technology	2.4	2.3	2.1	1.7	3.5
Methods in Mathematics	2.6	1.6	4.5	1.5	2.2
Applications of Mathematics	2.5	1.6	4.5	1.6	2.2
Dance	2.2	2.0	0.9	0.8	1.8
Economics	1.5	1.3	4.4	3.0	0.9
General Studies	1.7	1.5	1.3	0.5	3.6
Home Economics: Food	1.3	1.3	2.0	2.5	1.4
Latin	0.6	0.2	4.6	11.5	0.3
Humanities: Single	1.8	1.2	.	0.4	0.4
D&T Electronic Products	1.5	1.2	2.7	0.8	0.9
Art & Design (Textiles)	1.4	1.2	0.5	1.2	1.1
Art & Design (Graphics)	1.4	1.2	0.4	0.6	1.5
Health & Social Care	1.3	1.3	0.2	0.1	1.9
Film Studies	1.4	1.1	0.1	0.2	2.3
Applied Engineering	1.1	1.2	1.7	0.2	0.9
Performing Arts	1.0	1.1	0.3	0.4	2.7

Table 12: Uptake of individual subjects by attainment (% of students)

Subject	Low	Medium	High
Mathematics	95.4	96.1	86.9
English Literature	75.4	89.4	93.1
English Language	75.8	88.8	87.2
Science (Core)	68.6	74.5	42.2
Additional Science	46.3	67.9	40.6
Religious Studies	35.3	47.9	53.0
History	24.8	41.9	54.3
Geography	23.2	38.6	48.2
French	10.3	27.2	42.5
Biology	3.6	18.3	49.4
Chemistry	3.0	17.7	48.6
Physics	3.0	17.7	48.5
Physical Education/Sports Studies	16.6	22.2	17.3
Information & Communications Technology	17.1	19.5	15.4
Spanish	5.9	15.1	24.4
Art & Design	15.3	15.2	13.2
Business Studies: Single	9.7	15.1	13.1
Drama & Theatre Studies	10.0	13.0	13.2
English Language & Literature	21.3	9.3	2.6
German	2.9	9.0	16.4
Media/Film/TV Studies	10.2	10.5	6.0
Statistics	6.8	9.1	10.2
Art & Design (Fine Art)	7.7	8.6	9.9
D&T Resistant Materials	11.5	8.5	5.7
Music	4.2	6.9	11.1
D&T Food Technology	8.3	6.7	4.4
D&T Product Design	7.4	6.7	5.1
Computer Studies/Computing	3.2	5.9	7.2
D&T Graphic Products	5.4	5.9	4.8
D&T Textiles Technology	3.7	4.4	4.1
Further additional science	0.5	3.4	7.6
Art & Design (Photography)	4.7	4.3	2.1
Sociology	3.0	4.4	3.4
Social Science: Citizenship	4.0	3.9	2.6
Home Economics: Child Development	4.7	3.3	1.1
Psychology	1.7	3.1	3.2
Office Technology	2.4	2.7	1.9
Methods in Mathematics	1.7	2.1	2.5
Applications of Mathematics	1.7	2.0	2.5
Dance	1.8	2.3	1.9
Economics	0.5	1.3	2.9
General Studies	1.9	1.6	1.1
Home Economics: Food	1.7	1.5	1.2
Latin	0.0	0.2	4.0
Humanities: Single	1.6	1.5	1.0
D&T Electronic Products	1.2	1.4	1.5
Art & Design (Textiles)	1.3	1.4	1.1
Art & Design (Graphics)	1.3	1.5	1.0
Health & Social Care	1.7	1.4	0.6
Film Studies	1.6	1.2	0.6
Applied Engineering	1.5	1.1	0.7
Performing Arts	1.1	1.2	0.7

Table 13: Uptake of individual subjects by deprivation group (% of students)

Subject	Low	Medium	High
Mathematics	97.0	96.6	97.1
English Literature	91.6	88.1	84.2
English Language	91.6	88.0	83.8
Science (Core)	61.4	65.9	67.6
Additional Science	54.9	56.1	53.1
Religious Studies	47.1	45.5	47.3
History	45.8	40.7	34.7
Geography	42.9	36.4	29.5
French	31.3	25.8	21.6
Biology	32.0	22.7	15.1
Chemistry	31.6	22.2	14.6
Physics	31.7	22.3	14.5
Physical Education/Sports Studies	23.3	19.2	15.5
Information & Communications Technology	16.7	17.6	20.1
Spanish	16.6	13.9	13.2
Art & Design	13.7	15.3	15.6
Business Studies: Single	15.7	13.0	10.9
Drama & Theatre Studies	13.0	12.0	10.5
English Language & Literature	8.2	11.4	14.9
German	13.8	9.3	5.2
Media/Film/TV Studies	8.9	10.0	9.8
Statistics	8.7	9.6	9.3
Art & Design (Fine Art)	9.1	8.7	7.6
D&T Resistant Materials	8.5	8.9	7.9
Music	8.8	7.1	5.6
D&T Food Technology	7.3	7.2	6.2
D&T Product Design	6.7	6.6	6.7
Computer Studies/Computing	6.6	5.9	4.6
D&T Graphic Products	6.4	5.9	5.0
D&T Textiles Technology	4.5	4.3	4.1
Further additional science	4.4	4.0	4.0
Art & Design (Photography)	3.5	4.3	4.0
Sociology	3.3	3.7	4.8
Social Science: Citizenship	2.7	3.5	4.9
Home Economics: Child Development	2.7	3.6	3.6
Psychology	2.8	2.8	2.9
Office Technology	2.3	2.4	2.5
Methods in Mathematics	2.6	2.6	1.3
Applications of Mathematics	2.6	2.6	1.3
Dance	2.4	2.2	1.8
Economics	1.7	1.3	1.4
General Studies	1.6	1.9	1.5
Home Economics: Food	1.5	1.4	1.2
Latin	0.7	0.4	0.2
Humanities: Single	1.3	1.5	1.6
D&T Electronic Products	1.8	1.5	1.0
Art & Design (Textiles)	1.2	1.3	1.4
Art & Design (Graphics)	1.3	1.3	1.3
Health & Social Care	0.8	1.2	1.9
Film Studies	0.9	1.3	1.5
Applied Engineering	1.3	1.2	1.0
Performing Arts	1.0	1.2	1.1

Table 14: Uptake of individual subjects by school gender (% of students)

Subject	Boys School	Girls School	Mixed School
Mathematics	79.0	85.7	94.0
English Literature	85.1	88.9	85.6
English Language	76.2	82.9	84.2
Science (Core)	39.8	49.5	63.9
Additional Science	33.6	43.6	53.2
Religious Studies	49.8	61.7	43.5
History	47.2	46.4	39.3
Geography	45.8	40.7	35.6
French	32.5	36.1	25.5
Biology	39.5	35.3	21.8
Chemistry	38.6	34.3	21.2
Physics	38.8	34.1	21.1
Physical Education/Sports Studies	18.0	10.4	19.4
Information & Communications Technology	13.1	16.1	17.6
Spanish	21.0	25.7	13.9
Art & Design	7.3	14.2	14.9
Business Studies: Single	14.7	9.3	12.8
Drama & Theatre Studies	8.4	17.4	11.7
English Language & Literature	8.1	5.5	11.7
German	14.5	12.2	8.9
Media/Film/TV Studies	5.1	5.8	9.3
Statistics	9.2	5.6	8.9
Art & Design (Fine Art)	10.4	11.5	8.4
D&T Resistant Materials	12.0	2.5	8.8
Music	8.8	9.5	7.1
D&T Food Technology	1.8	6.2	6.7
D&T Product Design	8.7	4.9	6.4
Computer Studies/Computing	9.7	3.0	5.4
D&T Graphic Products	5.2	3.3	5.6
D&T Textiles Technology	0.1	7.2	4.0
Further additional science	2.6	4.3	3.9
Art & Design (Photography)	1.9	2.3	3.9
Sociology	0.4	4.7	3.7
Social Science: Citizenship	3.5	5.1	3.3
Home Economics: Child Development	.	3.2	3.2
Psychology	1.4	2.9	2.7
Office Technology	2.0	3.2	2.3
Methods in Mathematics	3.5	1.6	2.1
Applications of Mathematics	3.5	1.6	2.0
Dance	0.2	2.9	2.0
Economics	5.0	1.3	1.4
General Studies	0.5	0.6	1.7
Home Economics: Food	0.5	2.1	1.4
Latin	7.5	5.3	0.7
Humanities: Single	0.4	0.1	1.5
D&T Electronic Products	3.1	0.1	1.3
Art & Design (Textiles)	0.0	2.0	1.3
Art & Design (Graphics)	1.4	0.6	1.3
Health & Social Care	.	1.9	1.2
Film Studies	0.4	0.6	1.2
Applied Engineering	1.9	0.3	1.1
Performing Arts	0.3	0.9	1.1

Reference

Gill, T. (2016). *Uptake of level 2 qualifications in English schools 2015. Statistics Report Series No.103*. Cambridge Assessment. Available at: <http://www.cambridgeassessment.org.uk/our-research/all-published-resources/statistical-reports/>