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Uptake of GCE A level subjects 2016

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Introduction

This report looks at the uptake of A level subjects in England in 2016. The data for these analyses was 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 student characteristics such as age and gender. School census data, which is primarily available for students from state-maintained schools, provides information on student characteristics such as level of income deprivation.

For the analysis of uptake at A level, the Key Stage 5 (KS5) extract of the NPD was used. In previous years' reports (e.g. Gill & Williamson, 2016) data was restricted to students in year 13. However, the 2016 NPD does not attribute a year group to KS5 students, so instead the data was restricted to students who gained an A level in the 2015/16 school year and who were aged 17 or 18 at the start of the school year¹. Consequently, the composition of the students included in the analysis may differ from previous years, so comparisons between years must be interpreted with caution. A levels gained by these students in previous years were included to allow for exams taken in year 12 or earlier. Hence, uptake was defined as the percentage of these students taking an A level in the subject at any point during their KS5 career.

Tables 1 and 2 provide a breakdown of the number of A levels taken by students, including and excluding General Studies.

Table 1: Number of A levels taken (% of A level students)

Number of A levels	Percentage
1	11.2
2	15.7
3	63.8
4	8.6
5+	0.7
No. of students	262,893

Table 2: Number of A levels taken, excluding General Studies (% of A level students)

Number of A levels	Percentage
1	11.3
2	16.2
3	66.4
4	5.8
5+	0.4
No. of students	262,759

Table 1 shows that 9.3% of A level students in 2015/16 took more than 3 A levels. When General Studies was excluded, as shown in Table 2, only 6.2% of students took more than 3 A levels. These figures are lower than those seen in 2014/15 (including General Studies, 12.2%; excluding General Studies, 7.1%), so although caution must be applied to between-year comparisons, this may suggest that the decline noted in 2014/15 (see Gill & Williamson, 2016) has continued².

¹ Criteria were chosen to best represent year 13 A level students, primarily being students aged 17 at the start of the school year, but also including some students aged 18 at the start of the year (due to, for example, repeating a year). In the analysis of 2014/15 data, 17 year-olds made up 89.7% of the dataset, whilst 18 year-olds made up 9.8% and 16 year-olds made up 0.5%; this year, 17 year-olds made up 90.4% and 18 year-olds made up 9.6%.

² The proportion of students taking 4 or more A levels has declined each of the last 3 years. In the 2014/15 report (Gill & Williamson, 2016), it was suggested that the decline could be linked to changes to 16-19 funding. For further information on funding, see EFA guidance at <https://www.gov.uk/guidance/16-to-19-funding-how-it-works>.

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

School type

Students study A levels at several different types of school. In previous reports in this series, these were classified into seven groups. However, here, to better reflect true variability among schools, nine categories were used³: Academy (Comprehensive); Academy (Modern); Academy (Selective); Comprehensive; Further Education (FE) College; Grammar; Independent; Secondary Modern; Sixth Form College. For cases in which a candidate gained qualifications at more than one school during KS5, the candidate was associated with their school in 2015/16. Table 3 presents the number and percentage of A level students attending each school type (candidates attending schools denoted as 'other', or which are unidentified, are not included).

Table 3: A level students by school type

School type	Number of students	Percent
Academy (comprehensive)	91,179	34.7
Academy (modern)	2,899	1.1
Academy (selective)	19,233	7.3
Comprehensive	39,596	15.1
FE College	19,185	7.3
Grammar	3,300	1.3
Independent	35,035	13.3
Secondary Modern	978	0.4
Sixth Form College	51,488	19.6

Prior attainment

Students were classified by their attainment at KS4, based on their 'KS4 average points per entry' score in the NPD⁴. This score was used to divide students into three approximately equally sized groups, reflecting low, medium and high prior attainment. Table 4 presents the number in each group, as well as the mean, minimum and maximum scores for each group. There was a small amount of missing data for this measure, with about 2.5% of A level students having no score recorded⁵.

Table 4: A level students by prior attainment

Prior attainment group	Number of students	Minimum	Maximum	Mean
Low	85,198	8.0	44.7	41.3
Medium	85,647	44.7	49.6	47.0
High	85,426	49.6	67.5	53.2

³ New categories combine school type and selection policy, and are derived from Edubase, the Department for Education's register of educational establishments in England and Wales. Matching was carried out via the school's Unique Reference Number (URN). For further information, see Statistics Report No. 113 (Gill, 2017).

⁴ 'Average points per entry' is derived by converting qualifications awarded at KS4 into points and dividing the total by the number of qualifications for which a student was entered. In the years in which the students in the present report completed KS4, point scores were: A*=58, A=52, B=46, C=40, D=34, E=28, F=22, G=16, U=0. Scores over 58 show that a student gained a qualification at a higher level than GCSE, such as an AS level or free standing maths.

⁵ For students who completed KS4 before 2013/14, the proportion of missing data in the KS5 NPD was much larger, so candidates with missing data were manually matched to their scores in previous years' KS4 NPD extracts by their Pupil Matching Reference number and year of birth; the figure of 2.5% missing data reported refers to the overall proportion missing after this matching.

Income-related deprivation level

The level of income-related deprivation that students experience was inferred using the Income Deprivation Affecting Children Index (IDACI). This index is based on the home postcode, and describes the percentage of children in a very small geographical area (Lower Layer Super Output Area or LSOA) living in low income families⁶. It varies between 0 and 1 and indicates how income deprived the area in which a student lives is. It cannot, however, indicate how income deprived the student themselves is.

There was a large amount of missing data for this measure: 40.6% of students had no record⁷, so were excluded from this part of the analysis. The remaining students were divided into three approximately equally sized groups. Table 5 presents the number of students and the mean, minimum and maximum IDACI values in each group.

Table 5: A level students by deprivation group

Deprivation Group	Number of students	Minimum	Maximum	Mean
Low	52,062	0.00	0.07	0.04
Medium	52,060	0.07	0.19	0.12
High	52,065	0.19	0.99	0.36

School gender

“School gender” 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 6 shows the numbers and percentages of students attending the different types of schools.

Table 6: A level students by school gender

School gender	Number of students	Percent
Boys’ School	9,188	3.5
Girls’ School	17,647	6.7
Mixed School	236,058	89.8

⁶ For further information on IDACI calculation, including definitions of children, families, and income deprivation, see <https://www.gov.uk/government/publications/english-indices-of-deprivation-2015-technical-report>

⁷ The IDACI value is reported as part of the annual school census, so is primarily available only for students at state-maintained schools.

Number of A levels taken

The numbers of A levels taken by students in each of the different classifications described above are presented in Tables 7-10. For example, Table 7 shows that 61.5% of A level students in Comprehensive Academies took three A levels, compared to 70.9% of students in Independent schools and 64.4% of students in Sixth Form Colleges. Table 8 shows that 45.2% of A level students in the low prior attainment group took 3 A levels, compared to 76.2% of students in the high prior attainment group. Table 9 shows that 58.7% of students in the high deprivation group took 3 A levels, compared to 65.3% of students in the low deprivation group. Table 10 shows that 63.1% of students at boys' schools and at mixed schools took 3 A levels, compared to 73.6% at girls' schools.

Table 7: Number of A levels taken, by school type (% of students)

Number of A levels	Acad (comp)	Acad (mod)	Acad (sel)	Comp	FE College	Grammar	Ind	Sec Mod	6th Form College
1	13.3	25.8	1.6	14.0	11.9	1.5	5.2	30.6	12.1
2	18.0	26.6	4.3	18.6	18.9	4.3	8.4	34.8	17.1
3	61.5	43.3	70.3	59.5	65.5	74.0	70.9	32.1	64.4
4	6.9	4.1	20.7	7.4	3.6	17.2	14.1	2.5	6.2
5+	0.4	0.1	3.1	0.5	0.2	2.9	1.5	0.1	0.3
No. of students	91,179	2,899	19,233	39,596	19,185	3,300	35,035	978	51,488

Table 8: Number of A levels taken, by prior attainment (% of students)

Number of A levels	Low	Medium	High
1	24.4	7.1	1.7
2	27.7	15.4	4.5
3	45.2	71.1	76.2
4	2.6	6.2	16.0
5+	0.1	0.2	1.7
No. of students	85,198	85,647	85,426

Table 9: Number of A levels taken, by deprivation group (% of students)

Number of A levels	Low	Medium	High
1	8.6	11.7	16.0
2	14.4	16.9	18.1
3	65.3	61.6	58.7
4	10.8	9.0	6.7
5+	0.9	0.9	0.5
No. of students	52,062	52,060	52,065

Table 10: Number of A levels taken, by school gender (% of students)

Number of A levels	Boys' School	Girls' School	Mixed School
1	5.3	4.9	11.9
2	8.9	8.2	16.5
3	63.1	73.6	63.1
4	20.6	12.2	7.9
5+	2.1	1.1	0.6
No. of students	9,188	17,647	236,058

Uptake of individual A level subjects

In the following tables the uptake of individual subjects is presented, broken down into the different classifications described above. Subjects with overall uptake of less than 1% are not included. In each table the subjects are ordered by overall uptake (highest first).

Mathematics had the highest level of uptake overall, being taken by 28.0% of all A level students. Psychology was the second most popular subject overall (20.6% of students), overtaking Biology (19.5% of students), which was the second most popular subject in each of the previous three years. If all seven Art & Design options (see Appendix) were considered to be the same subject, it would be the 7th most popular subject overall with uptake of 12.4%, higher than both Physics and Geography.

For male students, Mathematics was the most popular subject (38.5% of male students), whilst Physics was the second most popular (19.9% of male students). For female students, Psychology was the most popular subject (28.3% of female students), whilst English Literature was the second most popular (21.9% of female students).

Table 11: Uptake of individual subjects by gender (% of A level students)

Subject	All	Male	Female
Mathematics	28.0	38.5	19.7
Psychology	20.6	10.9	28.3
Biology	19.5	17.0	21.5
History	17.8	18.3	17.4
Chemistry	16.3	18.4	14.6
English Literature	16.2	9.1	21.9
Geography	11.9	13.3	10.8
Sociology	11.4	5.8	15.9
Physics	11.2	19.9	4.3
Economics	10.0	15.3	5.8
Business Studies: Single	9.2	12.3	6.7
Religious Studies	8.4	5.8	10.4
English Language	7.8	5.4	9.7
Media/Film/TV Studies	7.0	6.7	7.3
Mathematics (Further)	5.1	8.3	2.5
Government & Politics	5.0	6.2	4.1
Art & Design (Fine Art)	4.7	2.2	6.6
General Studies	4.4	4.8	4.1
Art & Design (Photography)	4.3	2.4	5.8
Drama & Theatre Studies	4.2	2.9	5.2
English Language & Literature	4.2	2.6	5.4
Physical Education/Sports Studies	3.8	5.2	2.7
Law	3.8	3.1	4.3
D&T Product Design	3.1	5.0	1.7
French	3.1	2.2	3.8
Spanish	2.7	2.1	3.3
Film Studies	2.4	2.6	2.2
Art & Design	2.3	1.0	3.3
Information & Communications Technology	2.3	3.4	1.4
Computer Studies/Computing	2.1	4.2	0.4
Art & Design (Graphics)	1.6	1.7	1.6
Music	1.6	1.7	1.5
Classical Civilisation	1.4	1.1	1.6
German	1.2	1.1	1.4
Art & Design (Textiles)	1.2	0.1	2.1

Table 12: Uptake of individual subjects by school type (% of A level students)

Subject	Acad (comp)	Acad (mod)	Acad (sel)	Comp	FE College	Grammar	Ind	Sec Mod	6th Form College
Mathematics	26.0	16.3	44.2	23.9	20.3	48.8	41.5	15.7	22.1
Psychology	22.0	20.6	19.5	21.7	24.8	15.9	11.4	20.0	22.5
Biology	18.6	12.3	32.0	18.3	15.1	30.4	22.2	10.4	17.3
History	18.6	16.1	20.6	19.0	14.4	22.0	18.2	14.6	15.4
Chemistry	14.6	7.8	28.9	14.1	11.2	28.2	22.0	5.6	14.2
English Literature	17.0	17.5	18.1	18.4	13.8	20.5	16.6	23.2	12.8
Geography	12.1	12.2	16.4	12.2	7.7	14.7	15.8	8.1	8.3
Sociology	12.4	15.6	5.6	13.6	18.8	7.5	1.1	14.8	14.4
Physics	10.7	4.7	18.1	10.0	8.6	19.6	16.5	5.9	7.9
Economics	8.2	4.2	15.8	7.8	4.9	16.1	20.0	0.6	7.8
Business Studies: Single	8.6	6.4	7.9	7.6	12.1	5.6	10.4	7.0	10.5
Religious Studies	9.1	9.9	8.6	9.9	4.2	10.8	10.3	8.6	5.8
English Language	7.8	3.9	5.2	9.3	10.7	0.8	2.4	7.0	10.9
Media/Film/TV Studies	8.2	15.0	2.2	8.5	10.4	4.4	1.7	16.9	7.6
Mathematics (Further)	4.4	1.6	8.8	3.9	2.7	11.2	9.7	1.1	3.4
Government & Politics	4.0	2.2	7.4	4.3	4.4	5.8	8.6	2.0	4.6
Art & Design (Fine Art)	4.4	5.1	3.9	4.6	4.5	5.0	6.2	3.0	4.4
General Studies	4.5	3.1	13.7	5.3	0.4	7.9	1.9	2.7	3.1
Art & Design (Photography)	4.5	5.9	0.9	4.6	6.1	0.4	3.0	7.2	5.2
Drama & Theatre Studies	4.6	5.0	2.9	4.6	3.4	3.2	4.8	3.0	3.5
English Language & Literature	4.3	5.2	2.1	3.8	8.1	2.1	0.6	2.8	6.0
PE/Sports Studies	4.2	2.2	3.8	3.6	1.9	3.7	4.1	1.8	3.8
Law	2.6	3.8	1.2	2.9	9.2	0.9	0.3	2.7	8.1
D&T Product Design	4.1	3.7	3.4	3.8	0.4	4.7	3.9	1.8	1.2
French	2.5	1.2	4.5	2.3	1.7	4.8	6.6	0.9	2.3
Spanish	2.2	1.9	3.6	2.4	1.7	3.1	5.5	0.4	2.2
Film Studies	1.9	3.4	0.6	2.0	5.7	1.0	0.6	4.8	4.1
Art & Design	2.7	3.9	1.8	2.9	1.2	1.5	2.4	3.4	1.7
ICT	2.5	1.3	1.9	2.4	3.2	1.1	1.2	1.1	2.7
Computer Studies/Computing	2.1	0.5	2.9	1.6	2.3	2.3	1.0	1.2	2.8
Art & Design (Graphics)	1.2	1.7	0.2	1.0	3.4	0.4	0.7	0.7	3.4
Music	1.5	0.2	1.9	1.3	0.9	1.2	2.7	0.4	1.3
Classical Civilisation	0.6	0.5	1.5	0.6	1.5	2.7	2.8	0.5	2.3
German	1.1	0.3	2.2	0.9	0.5	2.5	2.3	0.1	0.9
Art & Design (Textiles)	1.1	1.3	0.3	0.9	1.8	0.8	0.8	0.6	2.0

Table 13: Uptake of individual subjects by prior attainment (% of A level students)

Subject	Low	Medium	High
Mathematics	8.9	23.4	49.9
Psychology	18.2	27.3	16.8
Biology	5.4	19.0	34.4
History	13.8	19.5	20.8
Chemistry	3.6	12.6	32.3
English Literature	13.7	17.6	18.1
Geography	7.7	14.1	14.3
Sociology	18.1	12.8	3.8
Physics	3.3	9.8	19.9
Economics	6.0	10.4	12.8
Business Studies: Single	12.4	11.3	3.8
Religious Studies	9.2	9.2	7.1
English Language	10.9	8.9	4.1
Media/Film/TV Studies	13.9	6.0	1.4
Mathematics (Further)	0.8	2.5	11.0
Government & Politics	4.4	5.3	5.5
Art & Design (Fine Art)	5.2	4.7	4.1
General Studies	2.8	4.5	6.1
Art & Design (Photography)	8.3	3.6	1.0
Drama & Theatre Studies	5.3	4.5	2.9
English Language & Literature	5.9	4.7	2.1
Physical Education/Sports Studies	3.7	5.3	2.5
Law	4.9	4.8	1.8
D&T Product Design	4.1	3.5	2.0
French	1.0	2.0	6.1
Spanish	1.1	2.2	4.7
Film Studies	4.6	2.0	0.6
Art & Design	2.7	2.3	1.9
Information & Communications Technology	3.7	2.5	0.7
Computer Studies/Computing	1.8	2.5	1.9
Art & Design (Graphics)	2.6	1.6	0.7
Music	0.9	1.6	2.2
Classical Civilisation	1.1	1.5	1.6
German	0.4	0.9	2.3
Art & Design (Textiles)	1.8	1.3	0.6

Table 14: Uptake of individual subjects by deprivation group (% of A level students)

Subject	Low	Medium	High
Mathematics	29.9	26.9	26.8
Psychology	21.1	20.8	22.5
Biology	20.9	19.5	20.2
History	20.2	19.9	16.8
Chemistry	16.4	15.1	17.4
English Literature	17.2	17.9	17.7
Geography	15.8	13.7	8.6
Sociology	9.7	10.8	15.0
Physics	13.0	11.7	9.8
Economics	9.9	8.3	9.0
Business Studies: Single	9.5	8.1	6.8
Religious Studies	8.4	9.0	10.5
English Language	8.9	8.2	5.9
Media/Film/TV Studies	7.0	7.9	8.0
Mathematics (Further)	5.7	4.8	4.1
Government & Politics	4.5	4.4	4.5
Art & Design (Fine Art)	4.4	4.9	4.0
General Studies	8.0	6.3	3.3
Art & Design (Photography)	3.6	4.5	4.0
Drama & Theatre Studies	4.6	4.7	3.8
English Language & Literature	3.8	4.3	3.6
Physical Education/Sports Studies	4.9	4.5	2.4
Law	2.2	2.3	2.8
D&T Product Design	4.4	4.3	3.2
French	3.2	2.8	2.2
Spanish	2.6	2.3	2.3
Film Studies	1.5	2.0	2.0
Art & Design	2.4	2.7	2.8
Information & Communications Technology	2.1	2.1	2.7
Computer Studies/Computing	2.0	2.2	2.0
Art & Design (Graphics)	1.0	1.0	1.0
Music	1.8	1.6	1.0
Classical Civilisation	0.8	0.8	0.6
German	1.5	1.2	0.9
Art & Design (Textiles)	0.9	1.0	0.9

Table 15: Uptake of individual subjects by school gender (% of A level students)

Subject	Boys' School	Girls' School	Mixed School
Mathematics	53.5	32.1	26.7
Psychology	6.2	23.5	20.9
Biology	23.0	29.6	18.7
History	20.3	19.8	17.6
Chemistry	27.9	24.1	15.3
English Literature	12.1	22.8	15.9
Geography	16.1	14.8	11.5
Sociology	1.3	8.8	12.0
Physics	25.2	8.5	10.9
Economics	23.6	11.4	9.4
Business Studies: Single	6.1	6.0	9.5
Religious Studies	8.3	13.0	8.0
English Language	2.3	4.2	8.3
Media/Film/TV Studies	1.7	3.0	7.5
Mathematics (Further)	13.4	5.0	4.8
Government & Politics	9.6	7.1	4.7
Art & Design (Fine Art)	3.4	5.8	4.6
General Studies	7.0	4.5	4.3
Art & Design (Photography)	1.1	2.8	4.5
Drama & Theatre Studies	2.4	5.1	4.2
English Language & Literature	1.6	1.6	4.5
Physical Education/Sports Studies	3.1	2.2	3.9
Law	0.6	0.7	4.1
D&T Product Design	3.6	1.6	3.2
French	5.4	6.0	2.8
Spanish	4.3	5.1	2.5
Film Studies	0.3	0.7	2.6
Art & Design	1.4	3.0	2.3
Information & Communications Technology	0.8	1.7	2.4
Computer Studies/Computing	3.7	0.4	2.1
Art & Design (Graphics)	0.6	0.4	1.8
Music	1.8	2.0	1.5
Classical Civilisation	1.0	2.7	1.3
German	2.2	2.1	1.2
Art & Design (Textiles)	0.0	1.3	1.2

Combinations of subjects

The ten most common subject combinations of at least three A levels are presented in Table 16. Tables 17 and 18 present the most common combinations for males and females respectively. The combination of Biology, Chemistry and Mathematics was the most popular overall (5.6% of students), and for males (5.5%) and females (5.8%) individually. However, whilst Chemistry, Mathematics and Physics was second most popular overall (2.6%) and for males (4.7%), the combination of Biology, Chemistry and Psychology was second most popular for females (2.2%).

Table 16: Most common combinations of A level subjects, excluding General Studies (% of students with at least 3 A levels)

Combination	Percent	Cumulative percent
Biology - Chemistry - Mathematics	5.6	5.6
Chemistry - Mathematics - Physics	2.6	8.2
Mathematics - Mathematics (Further) - Physics	1.9	10.1
Biology - Chemistry - Psychology	1.6	11.8
Chemistry - Mathematics - Mathematics (Further) - Physics	1.2	12.9
Biology - Chemistry - Geography	0.9	13.8
English Literature - History - Psychology	0.8	14.6
Biology - Mathematics - Physics	0.7	15.3
English Literature - History - Religious Studies	0.7	16.0
Economics - Mathematics - Physics	0.7	16.6

Table 17: Most common combinations of A level subjects, excluding General Studies, for male students (% of males with at least 3 A levels)

Combination	Percent	Cumulative percent
Biology - Chemistry - Mathematics	5.5	5.5
Chemistry - Mathematics - Physics	4.7	10.2
Mathematics - Mathematics (Further) - Physics	3.6	13.8
Chemistry - Mathematics - Mathematics (Further) - Physics	2.1	15.8
Economics - Mathematics - Physics	1.4	17.2
Computer Studies/Computing - Mathematics - Physics	1.1	18.3
Biology - Mathematics - Physics	1.1	19.4
Biology - Chemistry - Psychology	0.9	20.3
Geography - Mathematics - Physics	0.9	21.2
D&T Product Design - Mathematics - Physics	0.9	22.0

Table 18: Most common combinations of A level subjects, excluding General Studies, for female students (% of females with at least 3 A levels)

Combination	Percent	Cumulative percent
Biology - Chemistry - Mathematics	5.8	5.8
Biology - Chemistry - Psychology	2.2	8.0
English Literature - History - Psychology	1.2	9.2
Biology - Chemistry - Geography	1.0	10.2
Chemistry - Mathematics - Physics	0.9	11.1
English Literature - Psychology - Sociology	0.8	12.0
English Literature - History - Religious Studies	0.8	12.8
Biology - Mathematics - Psychology	0.8	13.6
Biology - Chemistry - History	0.7	14.3
English Literature - Government & Politics - History	0.7	15.0

Subject areas and domains

Table 19 presents the uptake of A levels in five broad subject areas. 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 the classifications of Bell *et al.* (2005) were followed where possible. Subject areas assigned are listed in the Appendix. This analysis was restricted to students with at least three A levels excluding General Studies.

Thus, considering only students who took at least three A levels, 28.0% of female students took at least one arts subject, compared to 19.2% of male students. Likewise, 27.9% of students in the low prior attainment group took at least one science subject, compared to 48.3% in the medium prior attainment group and 72.1% in the high prior attainment group.

Table 19: Uptake of subject areas by gender and prior attainment (% of students with at least three A levels excluding General Studies)

Subject area	F	M	Low	Medium	High	All
Arts	28.0	19.2	39.2	26.6	14.8	24.1
English	41.6	19.8	42.7	35.0	25.1	32.0
Languages	12.1	8.4	5.1	7.0	14.4	10.5
Science/Mathematics	45.4	66.2	27.9	48.3	72.1	54.6
Social Science/Humanities	76.0	66.4	80.9	79.0	62.2	71.8
Number of Students	106,403	84,231	40,003	65,703	79,981	190,634

Subjects were also grouped into three different domains: Science and Mathematics, Arts and Languages, and Social Science and Humanities (see Bell *et al.* 2005). Students who took subjects in only one domain were classified as specialists, whilst those who took subjects in two domains were classified as partly mixed. Students taking a subject in all three domains were classified as completely mixed. The uptake of these domains is presented in Table 20.

Thus, considering only students who took three or more A levels, 9.9% of female students specialised in Science/Maths, compared to 23.4% of male students. Overall, 25.4% of female students were classed as domain specialists, compared to 36.3% of male students. Conversely, 64.7% of female students were classed as 'partly mixed', compared to 55.4% of male students. The most common combination for female students was the mix of Arts/Languages with Social Sciences/Humanities (39.0%), whilst the most common combination for male students was the mix of Science/Maths with Social Sciences/Humanities (27.1%). Meanwhile, 5.9% of students in the low prior attainment group took subjects in all three domains, compared to 10.3% in the high prior attainment group.

Table 20: Uptake of combinations of subject domains by gender and prior attainment (% of students with at least three A levels excluding General Studies)

	Science / Maths	Arts / Languages	Social Sci / Humanities	F	M	Low	Med	High	All
Specialist	Yes	-	-	9.9	23.4	5.2	10.9	25.0	15.9
	-	Yes	-	6.7	2.8	10.4	4.5	2.6	4.9
	-	-	Yes	8.9	10.1	15.0	11.7	5.0	9.4
Total				25.4	36.3	30.6	27.1	32.6	30.2
Partly mixed	Yes	Yes	-	7.4	7.4	3.5	5.6	10.3	7.4
	Yes	-	Yes	18.3	27.1	13.3	22.6	26.5	22.2
	-	Yes	Yes	39.0	21.0	46.7	35.5	20.3	31.1
Total				64.7	55.4	63.5	63.7	57.1	60.6
Completely mixed	Yes	Yes	Yes	9.9	8.3	5.9	9.2	10.3	9.2

Facilitating subjects

In a guide to making decisions about post-16 education, the Russell Group of leading universities defined a group of 'facilitating' subjects: Maths, Further Maths, English Literature, Physics, Biology, Chemistry, Geography, History and Classical and Modern Languages (Russell Group, 2016). These are subjects that are required more often than others for university entry and which therefore give students a wider range of possible degree courses. Table 21 shows the number of the facilitating subjects taken by students at A level, broken down by gender and prior attainment. Table 22 presents the uptake of these subjects by school type and Table 23 presents the uptake by deprivation level.

Thus, considering students taking at least 3 A levels, Table 21 shows that 21.0% of female students took 3 or more facilitating subjects, compared to 32.0% of male students. Meanwhile, 38.3% of students in the low prior attainment group did not take any facilitating subjects, compared to 4.4% in the high prior attainment group. Table 22 shows that 25.0% of students at Comprehensive Academies took 3 or more facilitating subjects, compared to 34.1% of students at Independent schools and 18.6% of students at Sixth Form Colleges. Table 23 shows that 13.7% of students in the low deprivation group did not take any facilitating subjects, compared to 14.9% of students in the high deprivation group.

Table 21: Number of 'facilitating' subjects taken, by gender and prior attainment (% of students with at least three A levels excluding General Studies)

No. of subjects	F	M	Low	Medium	High	All
0	19.9	12.6	38.3	18.9	4.4	16.6
1	30.7	25.3	38.5	35.1	17.9	28.3
2	28.5	30.0	17.3	30.4	34.2	29.2
3 or more	21.0	32.0	5.8	15.6	43.5	25.9

Table 22: Number of 'facilitating' subjects taken, by school type (% of students with at least three A levels excluding General Studies)

No. of subjects	Acad (comp)	Acad (mod)	Acad (sel)	Comp	FE College	Grammar	Ind	Sec Mod	6th Form College
0	15.7	20.1	7.8	16.0	30.4	5.7	9.0	16.9	25.2
1	29.3	32.8	21.6	29.7	32.2	21.0	24.6	38.7	31.0
2	30.0	29.5	33.3	29.6	22.2	32.8	32.3	26.0	25.2
3 or more	25.0	17.6	37.4	24.7	15.2	40.5	34.1	18.4	18.6

Table 23: Number of 'facilitating' subjects taken, by deprivation group (% of students with at least three A levels excluding General Studies)

No. of subjects	Low	Medium	High
0	13.7	14.3	14.9
1	27.4	28.5	28.1
2	30.5	30.6	30.4
3 or more	28.3	26.6	26.5

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Appendix: Subject Classifications

Science/Maths

Additional Mathematics
Biology
Chemistry
Computer Studies/Computing
Electronics
Environmental Science
Geology
Information & Communications Technology
Mathematics
Mathematics (Further)
Mathematics (Pure)
Mathematics (Statistics)
Physics
Science in Society
Use of Mathematics

Social Science

Accounting/Finance
Ancient History
Anthropology
Archaeology
Business Studies: Single
Classical Civilisation
Classics (General)
Critical Thinking
D&T Food Technology
D&T Product Design
D&T Systems & Control
D&T Textiles Technology
Economics
Geography
Government & Politics
History
Home Economics: Food
Humanities: Single
Law
Logic/ Philosophy
Psychology
Religious Studies
Social Science: Citizenship
Sociology
World Development

English

Communication Studies
Drama & Theatre Studies
English Language
English Language & Literature
English Literature
Expressive Arts & Performance Studies

Languages

Arabic
Bengali
Chinese
Classical Greek
Dutch
French
German
Gujarati
Italian
Japanese
Latin
Modern Greek
Modern Hebrew
Other Classical Languages
Persian
Polish
Portuguese
Punjabi
Russian
Spanish
Turkish
Urdu

Arts

Art & Design
Art & Design (3D Studies)
Art & Design (Critical Studies)
Art & Design (Fine Art)
Art & Design (Graphics)
Art & Design (Photography)
Art & Design (Textiles)
Creative Writing
Dance
Film Studies
History of Art
Media/Film/TV Studies
Music
Music Technology
Physical Education/Sports Studies
