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Uptake of GCE A level subjects 2017

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Introduction

This report looks at the uptake of A level subjects in England in 2017. 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. For most of the equivalent A level uptake reports in previous years (e.g. Gill & Williamson, 2016) data was restricted to students in year 13. However, as with last year's report (Carroll & Gill, 2017), the 2016/17 NPD did not attribute a year group to KS5 students. Instead, the data was restricted to students who gained an A level in the 2016/17 school year and who were aged 17 or 18 at the start of the school year[1]. 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.

Results

Table 1 provides a breakdown of the number of A levels taken by students[2].

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

Number of A levels	Percentage
1	10.0
2	15.7
3	66.3
4	7.5
5+	0.5
No. of students	259,034

Table 1 shows that 8.0% of A level students in 2016/17 took more than 3 A levels. These figures are lower than those seen in 2015/16 (9.3%), continuing a downward trend noted in previous reports (see Gill & Williamson, 2016; Carroll & Gill, 2017)[3].

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.

[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 92.6% and 18 year-olds made up 7.4%.

[2] In previous years, there were additional tables based on data which excluded General Studies A level. However, this is now taken by only a very small proportion of A level students (2.8% in 2016/17) and will be discontinued from 2017/18, so these tables are no longer relevant.

[3] The proportion of students taking 4 or more A levels has declined each of the last 4 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.

School type

Students study A levels at several different types of school. These were classified into nine groups[4]: 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 2016/17. Table 2 presents the number and percentage of A level students attending each school type (candidates attending schools denoted as 'other', or which were unidentified, were not included).

Table 2: A level students by school type

School type	Number of students	Percent
Academy (comprehensive)	93,917	36.3
Academy (modern)	3,031	1.2
Academy (selective)	19,315	7.5
Comprehensive	35,571	13.7
FE College	17,526	6.8
Grammar	3,244	1.3
Independent	34,827	13.4
Secondary Modern	868	0.3
Sixth Form College	50,735	19.6

Prior attainment

Students were classified by their attainment at KS4, based on their 'KS4 average points per entry' score in the NPD[5]. This score was used to divide students into three approximately equally sized groups, reflecting low, medium and high prior attainment. Table 3 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 recorded[6].

Table 3: A level students by prior attainment

Prior attainment group	Number of students	Minimum	Maximum	Mean
Low	83,489	12.1	44.7	41.3
Medium	84,069	44.7	49.6	47.0
High	84,928	49.6	67.5	53.2

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

[4] The categories combine school type and selection policy, and were derived from Get Information About Schools service (formerly known as Edubase), the Department for Education's register of educational establishments in England and Wales, available at https://get-information-schools.service.gov.uk/. Matching was carried out via the school's Unique Reference Number (URN). For further information, see Statistics Report No. 113 (Gill, 2017).

[5] '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.

[6] For students who completed KS4 before 2014/15, 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.

Output Area or LSOA) living in low income families[7]. 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 actually is.

There was a large amount of missing data for this measure: 40.1% of students had no record[8], so were excluded from this part of the analysis. The remaining students were divided into three approximately equally sized groups. Table 4 presents the number of students and the mean, minimum and maximum IDACI values in each group.

Table 4: A level students by deprivation group

Deprivation Group	Number of students	Minimum	Maximum	Mean
Low	51,857	0.00	0.07	0.05
Medium	51,692	0.08	0.17	0.12
High	51,697	0.17	0.86	0.30

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 5 shows the numbers and percentages of students attending the different types of schools.

Table 5: A level students by school gender

School gender	Number of students	Percent
Boys' School	8,578	3.3
Girls' School	16,952	6.5
Mixed School	233,504	90.1

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 6-9. For example, Table 6 shows that 64.2% of A level students in Comprehensive Academies took three A levels, compared to 70.9% of students in Independent schools and 65.4% of students in Sixth Form Colleges. Table 7 shows that 47.4% of A level students in the low prior attainment group took 3 A levels, compared to 78.1% of students in the high prior attainment group. Table 8 shows that 61.1% of students in the high deprivation group took 3 A levels, compared to 69.1% of students in the low deprivation group. Table 9 shows that 62.5% of students at mixed schools took 3 A levels, compared to 75.9% at girls' schools.

[7] 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

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

Table 6: Number of A levels taken, by school type (% of A level students)

Number of A levels	Acad (comp)	Acad (mod)	Acad (sel)	Comp	FE College	Grammar	Ind	Sec Mod	6th Form College
1	12.0	23.2	1.4	12.4	9.0	0.9	4.1	26.4	11.7
2	17.3	28.0	4.5	17.4	18.6	4.8	10.7	30.4	17.7
3	64.2	45.5	75.4	63.3	68.3	78.2	70.9	40.6	65.9
4	6.2	3.3	17.0	6.6	3.9	14.1	13.0	2.6	4.4
5+	0.2	0.1	1.7	0.4	0.2	2.1	1.4	.	0.2
No. of students	93,917	3,031	19,315	35,571	17,526	3,244	34,827	868	50,735

Table 7: Number of A levels taken, by prior attainment group (% of A level students)

Number of A levels	Low	Medium	High
1	23.0	5.7	1.5
2	27.4	15.0	5.2
3	47.4	74.1	78.1
4	2.2	5.0	14.1
5+	0.1	0.2	1.1
No. of students	83,489	84,069	84,928

Table 8: Number of A levels taken, by deprivation group (% of A level students)

Number of A levels	Low	Medium	High
1	7.7	10.4	14.5
2	13.4	16.1	17.8
3	69.1	65.4	61.1
4	9.3	7.6	6.2
5+	0.6	0.5	0.4
No. of students	51,857	51,692	51,697

Table 9: Number of A levels taken, by school gender (% of A level students)

Number of A levels	Boys' School	Girls' School	Mixed School
1	5.2	4.4	10.6
2	10.5	8.2	16.4
3	62.5	75.9	65.7
4	19.8	10.8	6.8
5+	2.0	0.7	0.5
No. of students	8,578	16,952	233,504

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). It is worth noting that the first results for tranche one of the reformed A levels were issued in 2016/17, which may have had an impact on uptake of some A levels.

Mathematics had the highest level of uptake overall, being taken by 29.3% of all A level students. Psychology was the second most popular subject overall (20.6% of students), followed by Biology (19.8% of students). If all seven Art & Design options (see Appendix) were considered to

be the same subject, it would be the 8th most popular subject overall with uptake of 12.6%, higher than Physics.

For male students, Mathematics was the most popular subject (39.7% of male students), whilst Physics was the second most popular (20.9% of male students). For female students, Psychology was the most popular subject (28.0% of female students), whilst English Literature was the second most popular (22.2% of female students).

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

Subject	All	Male	Female
Mathematics	29.3	39.7	20.9
Psychology	20.6	11.4	28.0
Biology	19.8	16.8	22.2
Chemistry	16.8	18.5	15.5
History	16.8	17.1	16.5
English Literature	15.8	8.6	21.6
Geography	12.7	13.9	11.7
Sociology	12.0	6.1	16.7
Physics	11.9	20.9	4.5
Economics	10.4	16.1	5.9
Business Studies: Single	9.9	13.3	7.2
Religious Studies	8.2	5.4	10.5
English Language	7.0	4.8	8.7
Media/Film/TV Studies	6.7	6.2	7.0
Government & Politics	5.8	6.9	5.0
Mathematics (Further)	5.4	8.7	2.7
Art & Design (Fine Art)	5.1	2.4	7.2
Art & Design (Photography)	4.4	2.4	5.9
Drama & Theatre Studies	4.0	2.8	5.1
Law	3.9	3.0	4.6
English Language & Literature	3.8	2.4	5.0
Physical Education/Sports Studies	3.7	4.9	2.6
D&T Product Design	3.2	5.0	1.8
French	3.0	2.1	3.8
Computer Studies/Computing	2.8	5.6	0.5
Spanish	2.8	2.1	3.4
General Studies	2.8	3.1	2.5
Film Studies	2.3	2.5	2.2
Art & Design	2.0	1.0	2.9
Information & Communications Technology	2.0	3.0	1.1
Art & Design (Graphics)	1.6	1.6	1.6
Music	1.5	1.5	1.5
Classical Civilisation	1.3	1.0	1.6
German	1.2	1.1	1.2
Art & Design (Textiles)	1.2	0.1	2.1

Table 11: 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	27.0	15.7	45.8	24.8	22.0	48.0	42.7	17.2	23.6
Psychology	22.5	22.4	19.2	21.9	24.9	15.4	11.7	27.3	21.5
Biology	19.0	12.5	31.7	19.1	15.1	31.3	21.9	11.8	17.2
Chemistry	15.1	7.9	28.9	15.0	11.1	27.1	22.4	8.2	15.0
History	17.4	16.0	19.5	17.7	14.9	18.6	16.7	16.2	14.6
English Literature	16.8	17.3	17.4	18.1	13.2	19.5	15.8	25.0	12.1
Geography	13.0	11.0	17.2	12.9	8.1	15.9	16.9	7.9	9.0
Sociology	13.3	18.1	5.5	14.5	19.9	7.5	1.2	18.1	14.8
Physics	11.5	5.4	18.7	10.8	8.4	20.1	16.4	6.2	8.8
Economics	8.5	4.7	16.5	8.4	5.6	18.1	20.2	1.6	8.2
Business Studies: Single	10.0	8.2	7.8	8.8	12.3	6.2	10.7	8.9	10.4
Religious Studies	9.0	8.3	9.0	9.6	4.3	11.1	9.8	9.7	5.5
English Language	7.1	4.0	4.3	8.0	10.8	0.2	1.9	2.9	9.8
Media/Film/TV Studies	7.6	14.2	2.4	8.3	10.7	4.0	1.6	14.4	7.2
Government & Politics	4.6	3.4	8.2	5.2	5.1	5.1	9.6	2.5	5.6
Mathematics (Further)	4.6	1.6	9.3	4.3	3.1	10.7	9.8	1.2	3.7
Art & Design (Fine Art)	5.0	4.8	3.9	5.3	5.2	5.6	6.6	5.0	4.4
Art & Design (Photography)	4.5	6.9	0.9	4.9	6.5	0.4	3.0	6.9	5.2
Drama & Theatre Studies	4.4	4.1	2.9	4.2	3.2	3.1	5.0	1.0	3.4
Law	2.6	4.0	1.2	2.7	9.7	1.1	0.2	3.1	8.8
English Language & Literature	3.9	4.9	1.6	3.4	7.6	2.1	0.6	3.3	5.8
PE/Sports Studies	4.0	3.2	3.4	3.6	2.1	3.9	4.2	2.0	3.5
D&T Product Design	4.3	2.9	3.2	4.2	0.4	4.6	3.9	2.4	1.0
French	2.4	1.2	4.4	2.4	1.7	4.7	6.3	1.0	2.4
Computer Studies/Computing	3.0	1.3	3.6	2.4	3.1	2.8	1.2	0.7	3.4
Spanish	2.2	1.6	3.9	2.3	1.7	2.9	5.4	0.3	2.4
General Studies	3.0	1.6	7.1	4.2	0.2	6.0	1.0	0.9	1.5
Film Studies	1.9	2.4	0.7	2.0	5.4	1.0	0.5	3.3	4.0
Art & Design	2.4	2.9	1.7	2.4	1.3	1.8	1.9	2.9	1.6
ICT	2.1	0.9	1.4	2.1	3.0	1.7	0.9	1.2	2.2
Art & Design (Graphics)	1.2	2.2	0.2	1.2	3.2	0.2	0.7	0.3	3.4
Music	1.4	0.6	1.9	1.2	0.8	1.8	2.7	0.3	1.3
Classical Civilisation	0.6	0.8	1.5	0.6	1.4	2.0	2.9	0.7	2.1
German	1.0	0.3	2.3	1.0	0.5	2.1	2.2	0.2	0.8
Art & Design (Textiles)	1.1	1.5	0.3	0.8	1.6	0.8	0.9	0.6	2.0

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

Subject	Low	Medium	High
Mathematics	8.9	25.0	51.8
Psychology	19.2	27.3	16.0
Biology	6.2	19.8	33.2
Chemistry	4.1	13.4	32.3
History	13.2	18.3	19.2
English Literature	14.0	17.1	16.8
Geography	8.2	14.9	15.3
Sociology	19.7	13.1	3.8
Physics	3.8	10.7	20.2
Economics	6.1	11.1	13.4
Business Studies:Single	13.8	12.0	4.1
Religious Studies	9.0	8.9	7.0
English Language	10.0	7.9	3.4
Media/Film/Tv Studies	13.1	5.8	1.5
Government & Politics	4.9	6.3	6.4
Mathematics (Further)	0.7	2.7	11.6
Art & Design (Fine Art)	5.8	5.0	4.3
Art & Design (Photography)	8.4	3.7	1.1
Drama & Theatre Studies	5.0	4.3	3.0
Law	4.9	5.1	1.9
English Language & Literature	5.7	4.2	1.7
Physical Education/Sports Studies	3.7	4.9	2.5
D&T Product Design	4.2	3.4	2.1
French	0.9	2.1	5.9
Computer Studies/Computing	2.5	3.3	2.6
Spanish	1.1	2.2	4.7
General Studies	1.8	3.0	3.6
Film Studies	4.5	2.0	0.6
Art & Design	2.5	2.1	1.6
Information & Communications Technology	3.2	2.1	0.6
Art & Design (Graphics)	2.7	1.5	0.7
Music	0.9	1.5	2.2
Classical Civilisation	1.0	1.5	1.6
German	0.4	0.9	2.2
Art & Design (Textiles)	1.7	1.2	0.6

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

Subject	Low	Medium	High
Mathematics	31.1	28.6	27.4
Psychology	21.1	21.6	22.7
Biology	21.2	20.4	20.4
Chemistry	16.6	16.0	17.9
History	19.0	18.0	16.1
English Literature	16.4	17.7	17.8
Geography	17.0	14.1	9.3
Sociology	10.1	12.0	15.5
Physics	13.6	12.3	10.8
Economics	10.6	9.0	8.9
Business Studies: Single	10.8	9.1	8.0
Religious Studies	8.2	8.8	10.5
English Language	7.5	7.3	5.5
Media/Film/TV Studies	6.5	7.6	7.5
Government & Politics	5.3	5.0	5.1
Mathematics (Further)	5.9	5.2	4.3
Art & Design (Fine Art)	4.9	5.1	4.7
Art & Design (Photography)	3.8	4.5	4.1
Drama & Theatre Studies	4.4	4.4	3.5
Law	2.3	2.5	2.6
English Language & Literature	3.4	3.7	3.4
Physical Education/Sports Studies	5.0	4.1	2.3
D&T Product Design	4.5	4.3	3.5
French	3.2	2.8	2.0
Computer Studies/Computing	3.0	3.0	2.7
Spanish	2.6	2.2	2.4
General Studies	5.4	3.9	2.2
Film Studies	1.6	1.8	2.0
Art & Design	2.1	2.2	2.6
Information & Communications Technology	1.7	2.0	2.3
Art & Design (Graphics)	1.0	1.0	1.1
Music	1.8	1.4	0.9
Classical Civilisation	0.8	0.8	0.7
German	1.4	1.2	0.8
Art & Design (Textiles)	0.9	1.0	0.9

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

Subject	Boys' School	Girls' School	Mixed School
Mathematics	56.8	33.6	28.0
Psychology	6.5	22.4	21.0
Biology	21.4	29.9	19.0
Chemistry	27.7	24.6	15.9
History	17.3	18.5	16.6
English Literature	12.1	21.5	15.5
Geography	16.2	15.6	12.4
Sociology	1.6	9.8	12.5
Physics	25.5	9.0	11.6
Economics	23.5	11.5	9.9
Business Studies:Single	6.0	5.9	10.3
Religious Studies	7.3	13.5	7.9
English Language	2.3	3.9	7.4
Media/Film/Tv Studies	1.5	3.1	7.1
Government & Politics	10.6	7.8	5.5
Mathematics (Further)	14.5	5.1	5.1
Art & Design (Fine Art)	3.5	6.1	5.0
Art & Design (Photography)	0.8	2.9	4.6
Drama & Theatre Studies	2.0	4.6	4.1
Law	0.5	0.8	4.2
English Language & Literature	1.1	1.7	4.1
Physical Education/Sports Studies	3.1	2.0	3.8
D&T Product Design	3.7	1.8	3.3
French	5.2	6.0	2.7
Computer Studies/Computing	3.9	0.7	2.9
Spanish	4.2	5.3	2.5
General Studies	5.8	2.1	2.7
Film Studies	0.2	0.7	2.5
Art & Design	1.1	2.7	2.0
Information & Communications Technology	0.7	1.3	2.1
Art & Design (Graphics)	0.5	0.5	1.7
Music	1.7	2.2	1.4
Classical Civilisation	1.0	2.8	1.3
German	2.3	1.9	1.1
Art & Design (Textiles)	0.0	1.2	1.2

Combinations of subjects

The ten most common subject combinations of at least three A levels are presented in Table 15. Tables 16 and 17 present the most common combinations for males and females respectively. The combination of Biology, Chemistry and Mathematics was the most popular overall (5.7% of students), and for males (5.2%) and females (6.1%) individually. However, whilst Chemistry, Mathematics and Physics was second most popular overall (2.5%) and for males (4.5%), the combination of Biology, Chemistry and Psychology was second most popular for females (2.1%).

Table 15: Most common combinations of A level subjects (% of students with at least 3 A levels)

Combination	Percent	Cumulative percent
Biology - Chemistry - Mathematics	5.7	5.7
Chemistry - Mathematics - Physics	2.5	8.2
Mathematics - Mathematics (Further) - Physics	1.9	10.1
Biology - Chemistry - Psychology	1.6	11.7
Chemistry - Mathematics - Mathematics (Further) - Physics	1.1	12.9
Biology - Chemistry - Geography	0.9	13.8
Computer Studies/Computing - Mathematics - Physics	0.7	14.5
English Literature - History - Psychology	0.7	15.2
Economics - Mathematics - Physics	0.7	15.9
English Literature - Government & Politics - History	0.6	16.6

Table 16: Most common combinations of A level subjects, for male students (% of males with at least 3 A levels)

Combination	Percent	Cumulative percent
Biology - Chemistry - Mathematics	5.2	5.2
Chemistry - Mathematics - Physics	4.5	9.7
Mathematics - Mathematics (Further) - Physics	3.5	13.2
Chemistry - Mathematics - Mathematics (Further) - Physics	2.0	15.2
Computer Studies/Computing - Mathematics - Physics	1.6	16.7
Economics - Mathematics - Physics	1.4	18.1
Economics - Geography - Mathematics	1.0	19.2
Biology - Mathematics - Physics	1.0	20.2
Biology - Chemistry - Psychology	0.9	21.0
Geography - Mathematics - Physics	0.9	21.9

Table 17: Most common combinations of A level subjects, for female students (% of females with at least 3 A levels)

Combination	Percent	Cumulative percent
Biology - Chemistry - Mathematics	6.1	6.1
Biology - Chemistry - Psychology	2.1	8.2
English Literature - History - Psychology	1.1	9.3
Biology - Chemistry - Geography	1.1	10.4
Chemistry - Mathematics - Physics	1.0	11.3
English Literature - Psychology - Sociology	0.9	12.2
Biology - Mathematics - Psychology	0.8	13.0
English Literature - History - Religious Studies	0.8	13.7
English Literature - Government & Politics - History	0.7	14.4
Biology - Geography - Psychology	0.7	15.1

Subject areas and domains

Table 18 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.

Thus, considering only students who took at least three A levels, 27.7% of female students took at least one arts subject, compared to 18.8% of male students. Likewise, 28.3% of students in the low prior attainment group took at least one science subject, compared to 49.4% in the medium prior attainment group and 72.8% in the high prior attainment group.

Table 18: Uptake of subject areas by gender and prior attainment (% of students with at least three A levels)

	Gender		Prior attainment			
Subject area	**F**	**M**	**Low**	**Medium**	**High**	**All**
Arts	27.7	18.8	38.5	25.6	14.7	23.7
English	39.7	18.3	41.2	32.8	23.2	30.2
Languages	11.9	7.9	5.1	6.8	14.0	10.2
Science/Mathematics	46.0	66.6	28.3	49.4	72.8	55.1
Social Science/Humanities	76.5	67.8	81.8	79.3	63.2	72.7
Number of Students	107,160	85,442	41,440	66,669	79,264	192,602

For the next analysis, all Arts, English and Languages subjects were combined, so that subjects were classified 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 19.

Table 19: Uptake of combinations of subject domains by gender and prior attainment (% of students with at least three A levels)

	Science / Maths	Arts / Languages	Social Sci / Humanities	Gender		Prior attainment			
				F	**M**	**Low**	**Med**	**High**	**All**
Specialist	Yes	-	-	10.2	23.0	5.2	11.5	24.8	15.9
	-	Yes	-	6.1	2.5	9.5	4.0	2.3	4.5
	-	-	Yes	9.3	10.5	15.4	12.1	5.3	9.8
Total				**25.6**	**36.0**	**30.2**	**27.6**	**32.4**	**30.2**
Partly mixed	Yes	Yes	-	7.1	6.7	3.4	5.2	9.7	7.0
	Yes	-	Yes	18.9	28.8	13.7	23.8	28.2	23.3
	-	Yes	Yes	38.6	20.4	46.8	34.4	19.6	30.6
Total				**64.7**	**56.0**	**63.9**	**63.5**	**57.5**	**60.8**
Completely mixed	Yes	Yes	Yes	**9.7**	**8.0**	**6.0**	**8.9**	**10.1**	**9.0**

Thus, considering only students who took three or more A levels, 10.2% of female students specialised in Science/Maths, compared to 23.0% of male students. Overall, 25.6% of female students were classed as domain specialists, compared to 36.0% of male students. Conversely, 64.7% of female students were classed as 'partly mixed', compared to 56.0% of male students. The most common combination for female students was the mix of Arts/Languages with Social Sciences/Humanities (38.6%), whilst the most common combination for male students was the mix of Science/Maths with Social Sciences/Humanities (28.8%). Meanwhile, 6.0% of students in

the low prior attainment group took subjects in all three domains, compared to 10.1% in the high prior attainment group.

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 20 shows the number of the facilitating subjects taken by students at A level, broken down by gender and prior attainment. Table 21 presents the uptake of these subjects by school type and Table 22 presents the uptake by deprivation level.

Thus, considering students taking at least 3 A levels, Table 20 shows that 21.2% of female students took 3 or more facilitating subjects, compared to 31.1% of male students. Meanwhile, 37.8% 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 21 shows that 24.6% of students at Comprehensive Academies took 3 or more facilitating subjects, compared to 33.3% of students at Independent schools and 19.3% of students at Sixth Form Colleges. Table 22 shows that 14.1% of students in the low deprivation group did not take any facilitating subjects, compared to 15.3% of students in the high deprivation group.

Table 20: Number of 'facilitating' subjects taken, by gender and prior attainment (% of students with at least three A levels)

	Gender		Prior attainment			
No. of subjects	**F**	**M**	**Low**	**Med**	**High**	**All**
0	19.5	12.9	37.8	18.4	4.4	16.6
1	30.8	25.6	38.9	35.0	17.9	28.5
2	28.5	30.4	17.3	30.8	34.5	29.3
3 or more	21.2	31.1	6.0	15.8	43.3	25.6

Table 21: Number of 'facilitating' subjects taken, by school type (% of students with at least three A levels)

No. of subjects	Acad (comp)	Acad (mod)	Acad (sel)	Comp	FE College	Grammar	Ind	Sec Mod	6th Form College
0	16.1	21.2	7.1	16.5	30.6	6.4	8.5	15.2	24.8
1	29.7	35.6	22.2	29.3	32.9	21.9	25.2	36.5	30.2
2	29.6	26.0	33.4	30.1	21.8	33.2	33.0	31.7	25.6
3 or more	24.6	17.2	37.3	24.1	14.7	38.5	33.3	16.5	19.3

Table 22: Number of 'facilitating' subjects taken, by deprivation group (% of students with at least three A levels)

No. of subjects	Low	Medium	High
0	14.1	14.4	15.3
1	27.8	28.8	28.4
2	30.5	30.4	30.1
3 or more	27.6	26.4	26.1

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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