

Uptake and results in the Extended Project Qualification

Research Report

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Introduction

The Extended Project Qualification (EPQ) is available for students to take in Key Stage 5 (KS5) alongside other qualifications, such as A levels. It differs from most other academic qualifications at KS5 in that it is not examined, but instead involves students undertaking an in-depth project in an area of their choosing. Students are required to plan the project, research and analyse sources of information, write up their analysis, draw conclusions and produce an evaluation of the processes involved. As such, it is promoted by exam boards as providing the skills required for university study or for work. Universities also seem to value the qualification, with many reducing their standard offers to students who have achieved a high grade in the EPQ¹.

A previous Statistics Report from Cambridge Assessment (Gill, 2016) investigated the uptake of EPQ in 2014/15 by various students' background characteristics such as school type, prior attainment or deprivation. It also looked at the number of A levels taken by EPQ students, most popular A level subjects taken, and correlations between EPQ grade and A level grades. The EPQ is a popular qualification which has had increased uptake in recent years. Between 2008 and 2016, the number of students taking it increased from 1,706 to 38,548 (He & Black, 2018). It is therefore of interest to take an updated look at the background characteristics of students who take the EPQ and how its grades relate to grades in A level subjects.

In this research project we addressed the following questions:

1. What are the background characteristics of EPQ students?
2. How do EPQ grades relate to A level grades in different subjects?
3. What proportion of students start an EPQ, but do not complete it?

Data and methods

The main source of data for this project was the National Pupil Database (NPD). The NPD is administered by the Department for Education (DfE) and includes examination results for all students in all qualifications and subjects in schools and colleges in England, as well as student and school background characteristics such as gender, ethnicity, level of income-related deprivation and school type. KS5 extracts of the NPD for 2016/17 and 2018/19 were used. This was the most recent available data at the time the project started. For all the analyses, the NPD data was restricted to students who took at least one qualification equivalent in size to an A level and who were aged 17 or 18 at the start of the academic year.

For research question 1, we compared the uptake of EPQ with uptake of the most popular A level subjects for different groups, based on background characteristics. These were gender, prior attainment, deprivation, ethnicity, first language, special educational needs (SEN), school type and school gender.

¹ See, for example, <https://www.southampton.ac.uk/learnwithustransition/epq-support/admissions-policy.page>

For prior attainment, students were split into three equally sized groups ('High', 'Medium', 'Low') based on their average points score (APS) at Key Stage 4 (KS4)². This variable was already in the NPD data and was calculated by assigning a points score to each achieved grade³ and averaging this across all KS4 qualifications taken by a student.

Student deprivation was measured by the Income Deprivation Affecting Children Index (IDACI), which indicates the proportion of children in a very small geographical area (Lower Layer Super Output Area or LSOA) living in low-income families⁴. This variable was also available in the NPD. It varies between 0 and 1 and indicates how income deprived the area is that they live in (although it cannot tell us how income deprived the student actually is). Students were split into three equally sized groups based on their IDACI score ('High', 'Medium', 'Low').

We used the ethnicity categories in the NPD to group students by their ethnic background: Asian, Black, Chinese, Mixed, White, Other, and Unclassified. Chinese students were in a category of their own due to a well-known tendency to perform very well compared to other Asian students. Students were also grouped by their first language (English or other).

For the students with SEN, we used the categories in the NPD. These were 'SEN, no statement', and 'SEN, with statement', with the second of these requiring the most support⁵.

For the analysis by school type, schools were grouped into five categories: comprehensive (including academies and secondary moderns), colleges (further education / tertiary / sixth form), independent schools, selective schools, and other schools.

Schools were also categorised by their 'gender' (i.e., boys, girls, or mixed). This was derived from the percentage of girls in each school. If this was greater than 95% then the school was categorised as a girls school, if it was less than 5% it was categorised as a boys school. Otherwise, it was categorised as a mixed school.

The main aim of research question 2 was to estimate the relative difficulty of the EPQ, compared with A levels. For this, we employed three different methods. Firstly, cross-tabulations of EPQ grade and A level grades (overall and at subject level). If students achieving a particular EPQ grade tended to get lower grades in an A level, this would indicate that EPQ was easier than the A level.

Secondly, a comparison of the prior attainment (at Key Stage 4) of students achieving each EPQ grade with the prior attainment of those achieving each grade in A levels. If the average prior attainment for a student achieving a particular grade in their EPQ was lower

² This was amongst all KS5 students, not just those taking A levels.

³ Most candidates taking A levels in 2019 would have taken KS4 qualifications in 2017 when there were a mix of reformed and pre-reform GCSE subjects. For reformed GCSEs the points score was the same as the grade (e.g., 9, 8 etc.). For pre-reform GCSEs, the following points score were assigned to each grade: A*=8.5, A=7, B=5.5, C=4, D=3, E=2, F=1.5, G=1, U=0. See DfE (2017) for details.

⁴ For further information on IDACI calculation, including definitions of children, families, and income deprivation, see Smith *et al* (2015).

⁵ A statement of special educational needs is a legal document which outlines the educational needs of the child and how they will be met by the local education authority.

than for students achieving the same grade in an A level, then this would indicate that it was easier to achieve this grade in the EPQ than in the A level.

Thirdly, Kelly's method (Kelly, 1976) for calculating subject difficulty ratings was also used to estimate the difficulty of the EPQ. This method consists of an iterative process, based on comparing the grades achieved by students in different subjects. Each iteration makes small adjustments to the grades in each subject (after converting grades from letters to numbers) so that they are better aligned with all other subjects. This process continues until the adjustments made at each iteration are below a pre-defined threshold. The overall adjustment indicates how difficult or easy each subject is. Positive values indicate harder subjects, and negative values indicate easier subjects, with zero indicating the average across all the subjects in the analysis. For more details on this method, see Coe (2007).

The third research question looked at the proportion of students who started an EPQ but did not complete it. This is of interest because there is anecdotal evidence highlighting concerns from HE admissions tutors that a relatively high proportion of students who said they were doing an EPQ in their application to HE did not complete it. The implication being that some of these students said they were taking the qualification in order to get an offer and then dropped it. For this analysis, we assumed that candidates awarded a grade 'X' had started the qualification, but not completed it. A grade X means 'no result' and could be for several reasons, including the candidate failing to complete work for all components, failing to provide an internal assessment sample, an incorrect combination of components, or a script not being available to be marked (OCR, 2016).

For research questions 1 and 2, we used data from 2018/19, as this was the most recent available data at the time of writing. For research question 3, we used data from 2016/17, because in the data for 2018/19 there were no qualifications awarded a grade X⁶.

Results

RQ1: What are the background characteristics of EPQ students?

In 2018/19, there were 45,687 entries for EPQ. This is a further increase in entries compared to the 38,548 entries in 2015/16 reported in He & Black (2018). In Table 1 and Figures 1 to 7 we compare the number and percentage of students taking EPQ in 2018/19 with those taking other A level subjects, in terms of their characteristics.

Table 1 presents the number and percentage of students, by gender. The first thing to note is that EPQ was more popular than the 6th most popular A level subject (English literature). This table also shows that EPQ students were more likely to be female (60.1%) than male. Compared to other subjects, the percentage of female students taking EPQ was much higher than in maths or physics, but substantially lower than in English literature or sociology.

⁶ This was likely to be because these grades were no longer recorded in the NPD, not because there were no candidates achieving a grade X.

Table 1: EPQ and A level students, by gender

Subject	Students	Females	Males	Female %	Male %
Maths	77,508	30,115	47,393	38.9	61.1
Psychology	59,871	44,583	15,288	74.5	25.5
Biology	59,870	37,769	22,101	63.1	36.9
Chemistry	51,168	27,464	23,704	53.7	46.3
History	46,051	25,960	20,090	56.4	43.6
EPQ	45,687	27,451	18,236	60.1	39.9
English Lit	36,420	28,294	8,126	77.7	22.3
Sociology	34,446	26,628	7,818	77.3	22.7
Physics	34,114	7,632	26,482	22.4	77.6
Geography	31,478	16,093	15,385	51.1	48.9

Figure 1 shows the percentage of students who took an EPQ who were in different prior attainment groups and compares that with the percentages taking A level subjects. The mean of the average points score was 3.9 for the low attaining group, 5.4 for the medium attaining group and 7.1 for the high attaining group.

This figure shows that EPQ students were most likely to be in the high attainment group (61.6%). However, there were four A level subjects (maths, biology, chemistry, and physics) with higher percentages of candidates in the high attainment group.

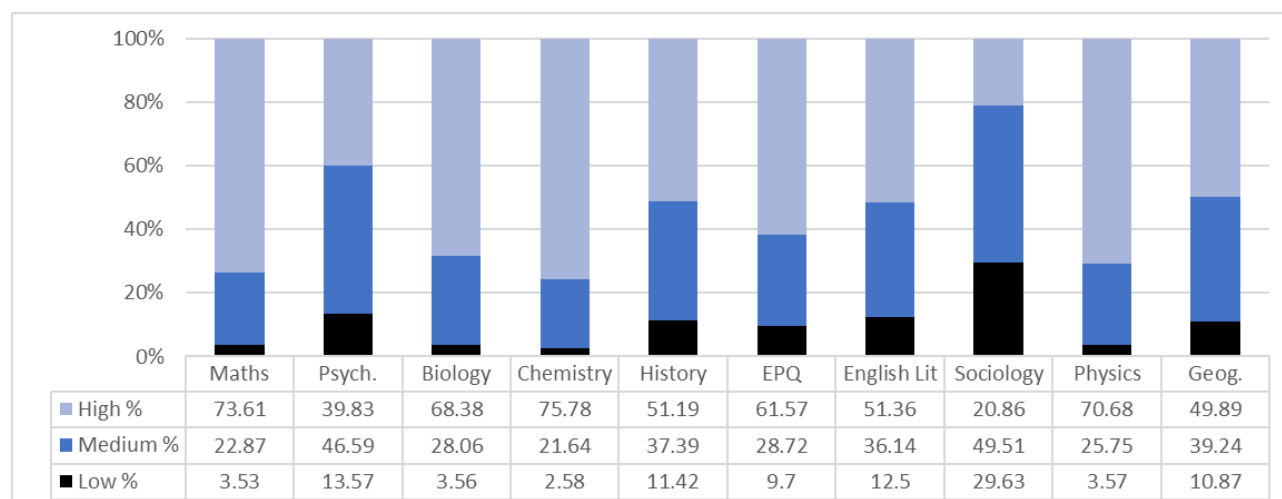


Figure 1: EPQ and A level students, by prior attainment category

For the next four background characteristics we looked at (IDACI score, ethnicity, language and SEN) there was a significant amount of missing data. These variables are collected as part of the school census, using information provided by the schools. However, independent schools and colleges are not required to provide this information, leading to large amounts of missing data from these school types. Table 2 shows the number and percentage of students with non-missing data for EPQ and the A level subjects. The percentages in each category in Figures 2 to 5 relate to these students only.

Table 2: Number and percentage of students with non-missing data for EPQ and A level subjects

Subject	All students	Students without missing data	Students without missing data (%)
Maths	77,508	46,275	59.7
Psychology	59,871	37,903	63.3
Biology	59,870	38,806	64.8
Chemistry	51,168	32,059	62.7
History	46,051	29,612	64.3
EPQ	45,687	28,121	61.6
English Lit	36,420	23,627	64.9
Sociology	34,446	21,744	63.1
Physics	34,114	21,566	63.2
Geography	31,478	20,862	66.3

Figure 2 presents the students taking EPQ and other A levels, split by deprivation group. The mean IDACI score was 0.05 for students experiencing low deprivation, 0.13 in the medium deprivation group and 0.32 in the high deprivation group.

EPQ students were more likely to be in the low deprivation group than in the other two groups. There was only one subject (geography) with a higher percentage of students in the low deprivation group.

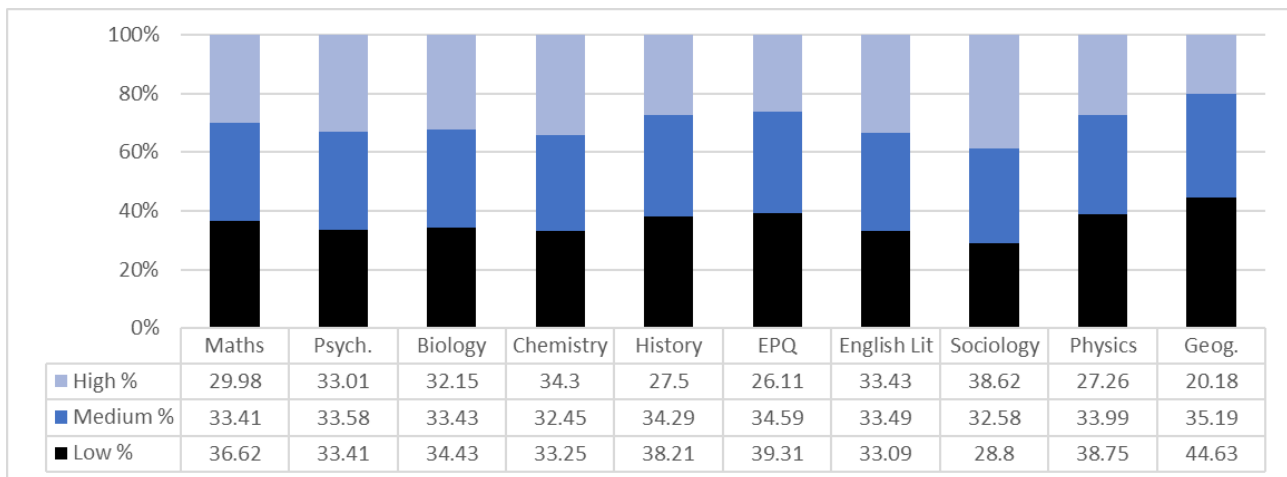


Figure 2: EPQ and A level students, by deprivation category

Figure 3 presents the data split by ethnic group.

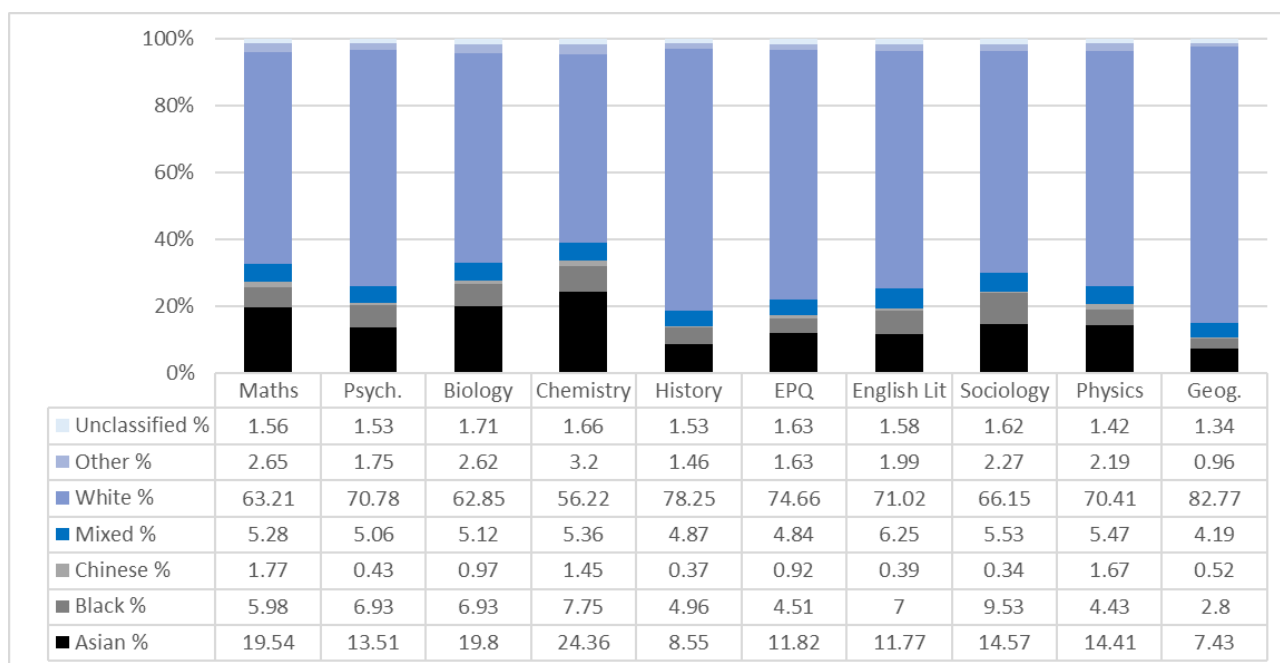


Figure 3: EPQ and A level students, by ethnic group

This shows that EPQ students were more likely to be white and slightly less likely to be Asian or black when compared to students taking most of the other A level subjects in the table. Only two A level subjects (history and geography) had higher proportions of white students.

Figure 4 presents the percentages taking EPQ by language. EPQ students were more likely to have English as their first language when compared to most other subjects. Only history and geography had higher proportions of English as first language students.

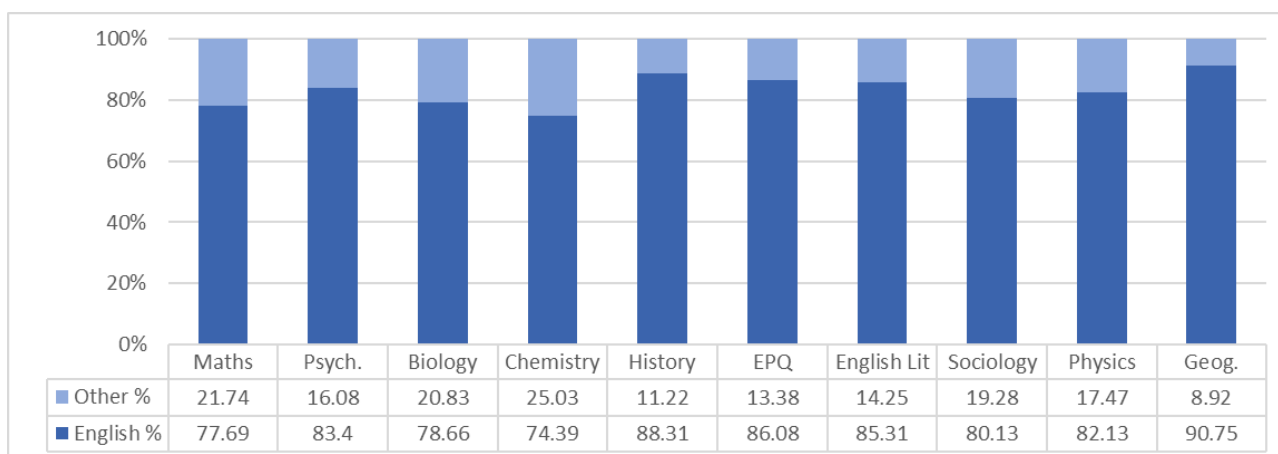


Figure 4: EPQ and A level students, by first language

Figure 5 presents the numbers taking EPQ split by SEN group. This shows that EPQ students were more likely than students taking all the other subjects apart from physics to have SEN with no statement.

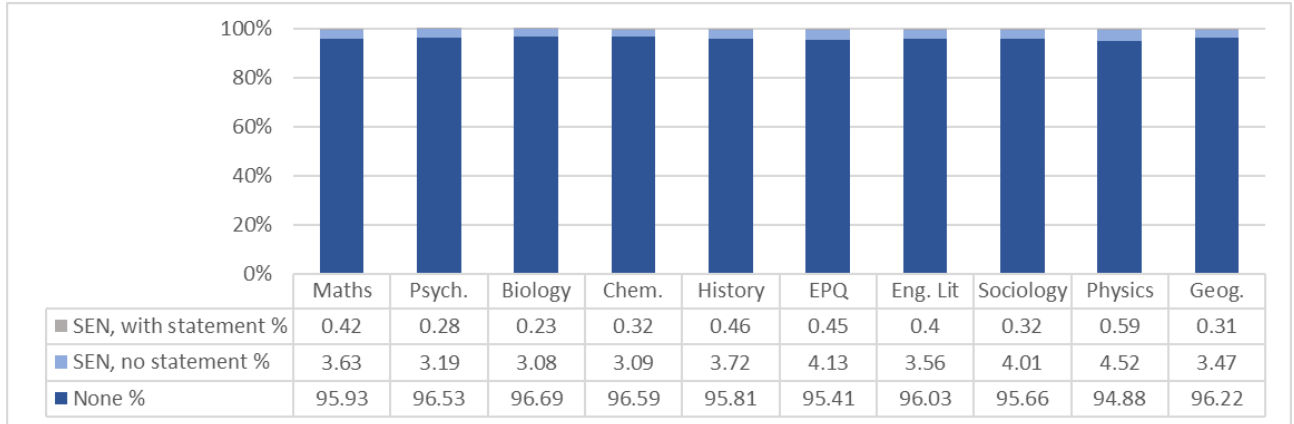


Figure 5: EPQ and A level students, by SEN status

Figure 6 shows the percentage of students in each school type. Compared with students taking the A level subjects in the table, EPQ students were more likely to attend independent or selective schools and less likely to attend comprehensive schools.

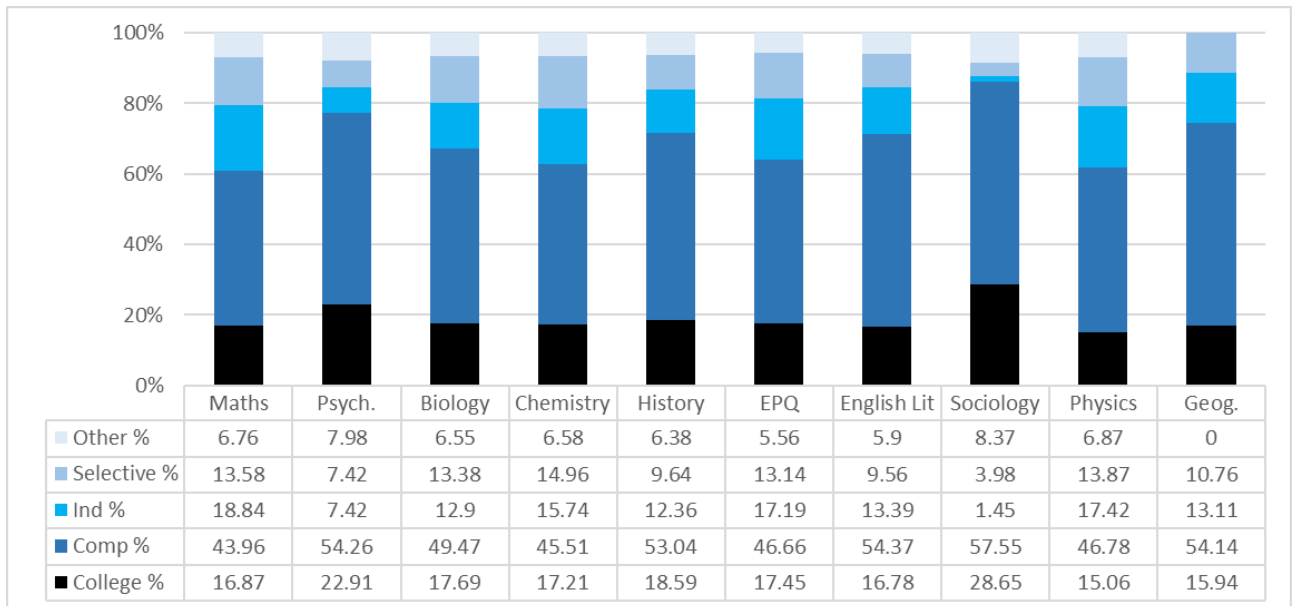


Figure 6: EPQ and A level students, by school type

Figure 7 presents the data split by school gender. This shows that EPQ students were more likely to attend a girls school and less likely to attend a mixed school, when compared with most other subjects.

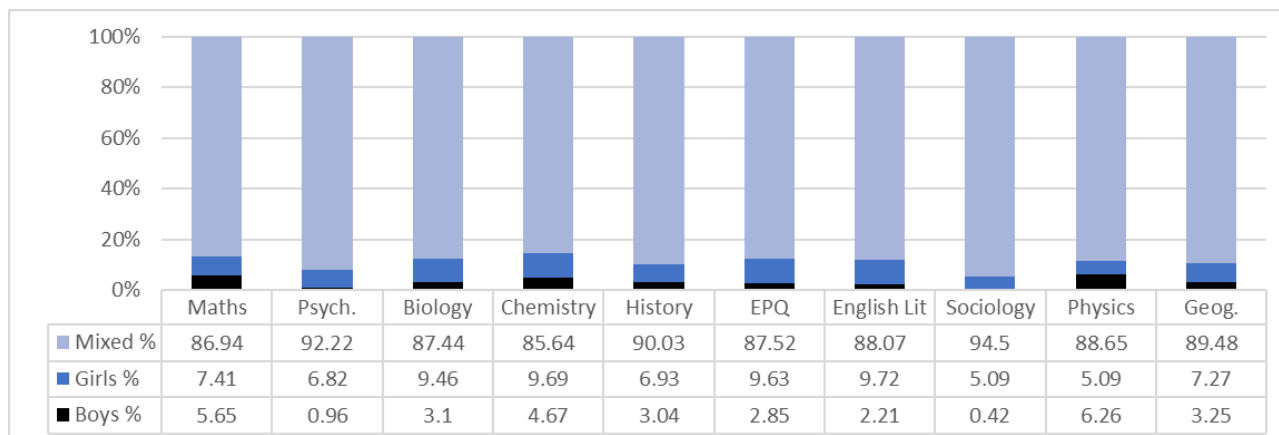


Figure 7: EPQ and A level students, by school gender

RQ2: How do EPQ grades relate to A level grades in different subjects?

The main purpose of this analysis was to infer the difficulty of the EPQ, compared with a selection of the most popular A levels. Table 3 presents the 10 A level subjects most likely to be taken alongside EPQ, the numbers and percentages taking both and the correlations between EPQ grade and A level subject grade.

Table 3: A levels subjects most likely to be taken with EPQ

Subject	Total candidates	Candidates also taking EPQ	% of cands taking EPQ	Correlation
Maths	77,508	15,296	19.7	0.414
Biology	59,870	12,817	21.4	0.466
Chemistry	51,168	10,985	21.5	0.419
History	46,051	10,077	21.9	0.481
Psychology	59,871	9,479	15.8	0.479
English Lit	36,420	7,903	21.7	0.489
Physics	34,114	6,476	19.0	0.431
Geography	31,478	6,083	19.3	0.504
Sociology	34,446	4,135	12.0	0.431
Business Studies	29,278	3,395	11.6	0.364

For most A level subjects, around 20% of students also took an EPQ. However, the percentages were considerably lower for sociology and business studies. This may reflect the fact that these subjects are more likely to be taken by lower attaining students (Gill, 2018), who are less likely to take the EPQ (see Figure 1 in this report).

All the correlations were reasonably high and were generally slightly higher than the equivalent correlations reported in the previous analysis of EPQ grades (Gill, 2016), suggesting that there was a good relationship between EPQ grade and A level grade. The highest correlations were with geography (0.504) and English literature (0.489), and the lowest correlations were with business studies (0.364) and maths (0.414).

Table 4 shows the mean grade achieved on EPQ and on each of the 10 A level subjects most likely to be taken alongside EPQ, for students who took both the EPQ and the A level subject. The mean grade was calculated by assigning a number to each grade (A*=6, A=5, B=4E=1, U=0). For example, 15,296 students took both EPQ and A level maths and these students achieved a mean grade of 4.45 on EPQ and 4.09 on A level maths.

The table shows that the mean EPQ grade was higher than the mean A level grade for all subjects apart from sociology and business studies, suggesting that EPQ was easier than most of these A levels. The largest differences in mean grade were in the three sciences.

Table 4: Mean EPQ grade and A level grade amongst students taking both qualifications

Subject	n	EPQ mean grade	A level mean grade
Maths	15,296	4.45	4.09
Biology	12,817	4.44	3.70
Chemistry	10,985	4.53	3.80
History	10,077	4.35	4.02
Psychology	9,479	4.01	3.67
English Lit.	7,903	4.40	4.09
Physics	6,476	4.28	3.67
Geography	6,083	4.19	4.02
Sociology	4,135	3.64	3.78
Bus. Studies	3,395	3.55	3.62

Figure 8 compares the cumulative grade distributions for the EPQ and for A level maths amongst students taking both qualifications.

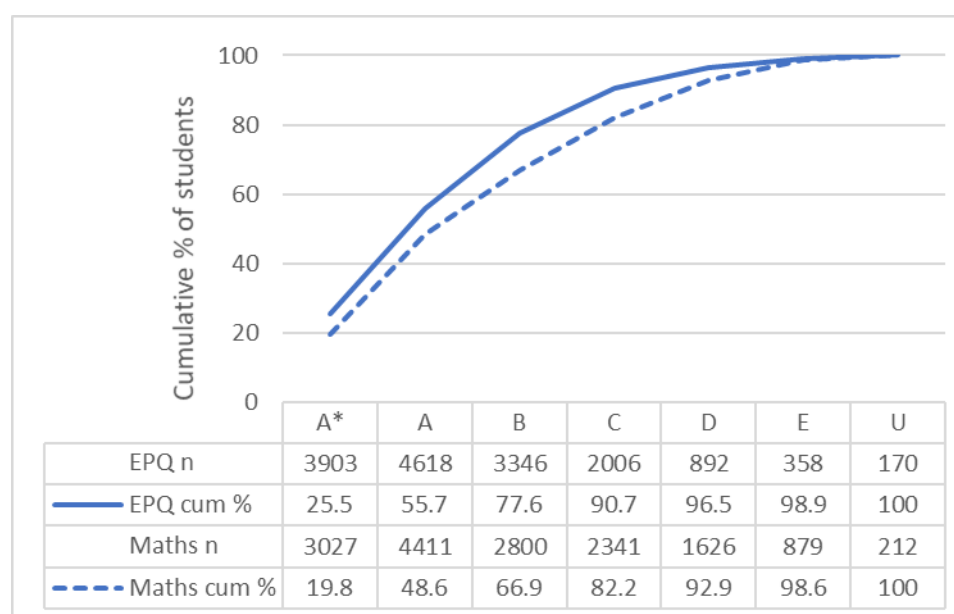


Figure 8: Cumulative grade distributions for EPQ and A level maths (students taking both qualifications only)

This shows that, for example, 55.7% of these students achieved at least a grade A in EPQ and 48.6% achieved at least a grade A in maths. We can see from the figure that, at each

grade, a higher percentage achieved at least that grade in EPQ than in maths. One interpretation of this would be that EPQ was easier than maths.

Figures 9 to 17 present the equivalent comparisons between EPQ grades and grades in each of the remaining 10 A levels most likely to be taken alongside EPQ

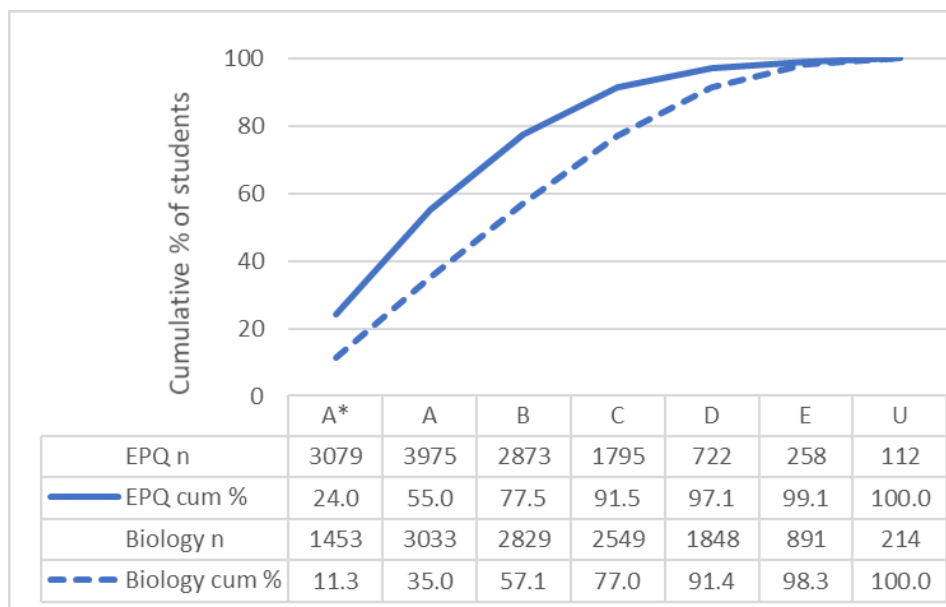


Figure 9: Cumulative grade distributions for EPQ and A level biology (students taking both qualifications only)

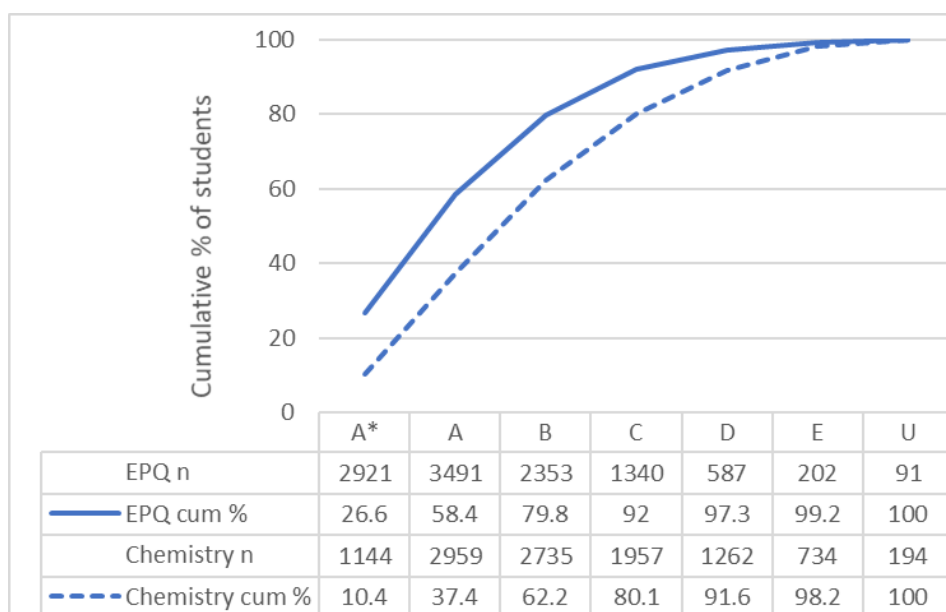


Figure 10: Cumulative grade distributions for EPQ and A level chemistry (students taking both qualifications only)

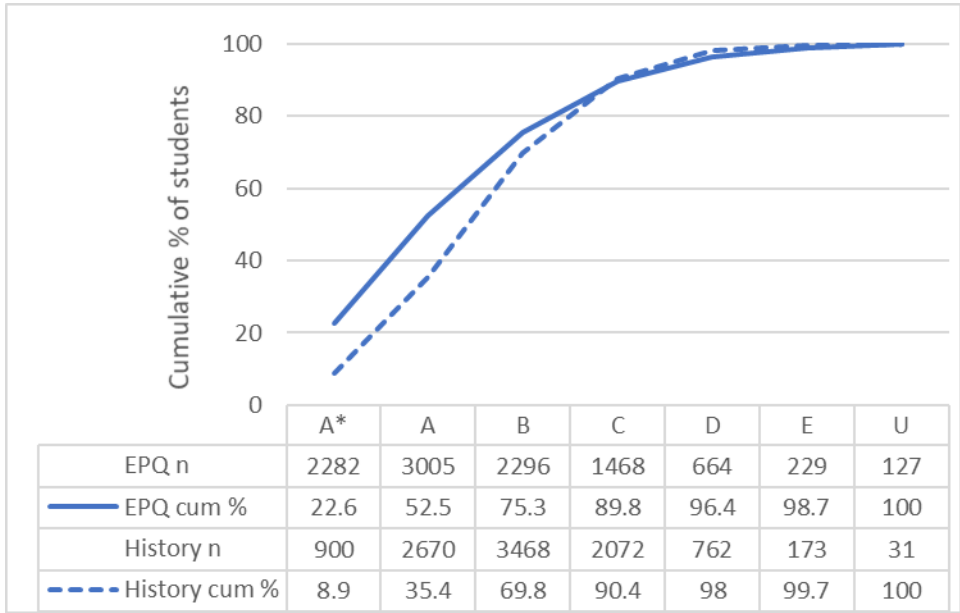


Figure 11: Cumulative grade distributions for EPQ and A level history (students taking both qualifications only)

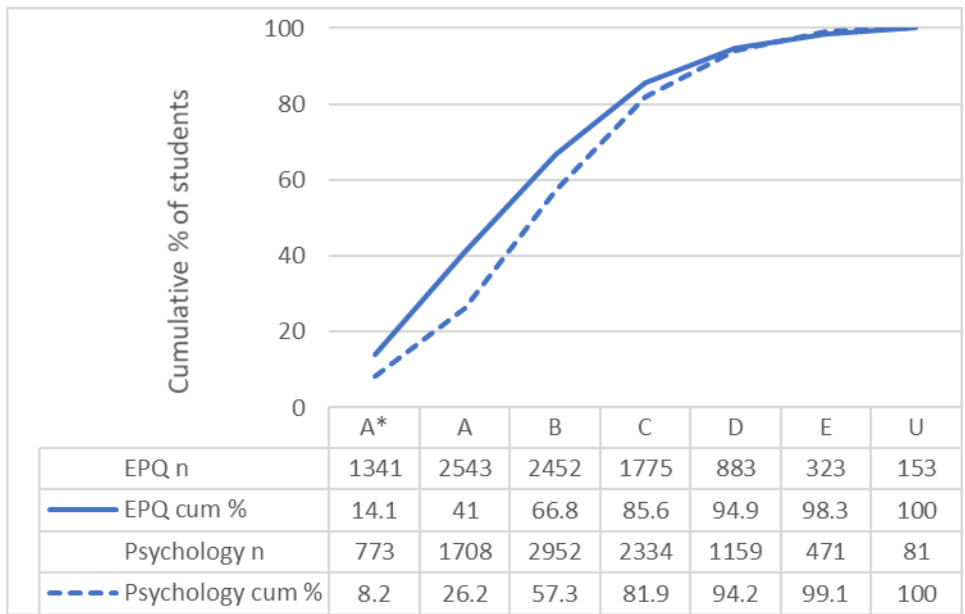


Figure 12: Cumulative grade distributions for EPQ and A level psychology (students taking both qualifications only)

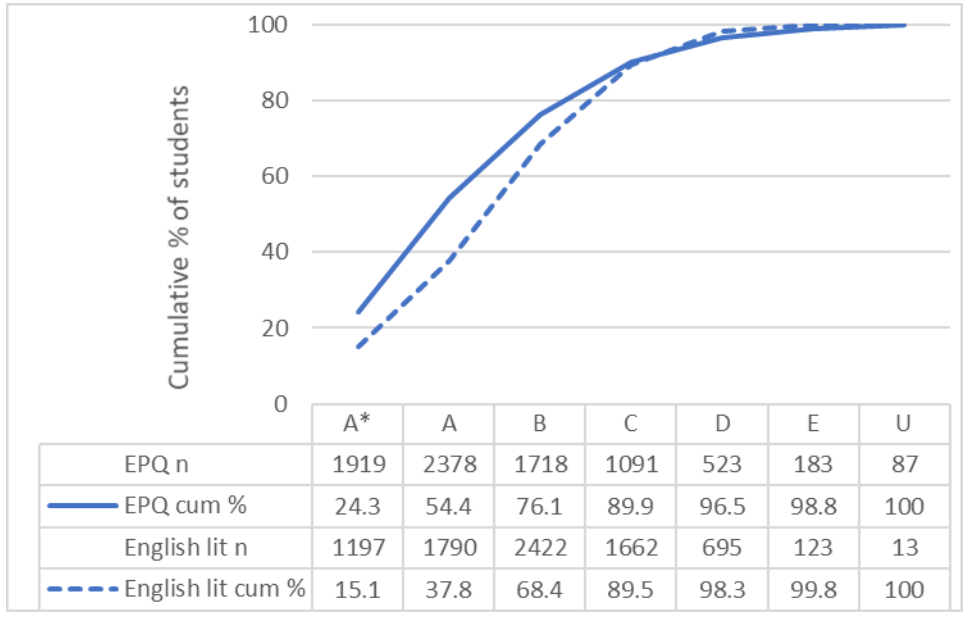


Figure 13: Cumulative grade distributions for EPQ and A level English lit (students taking both qualifications only)

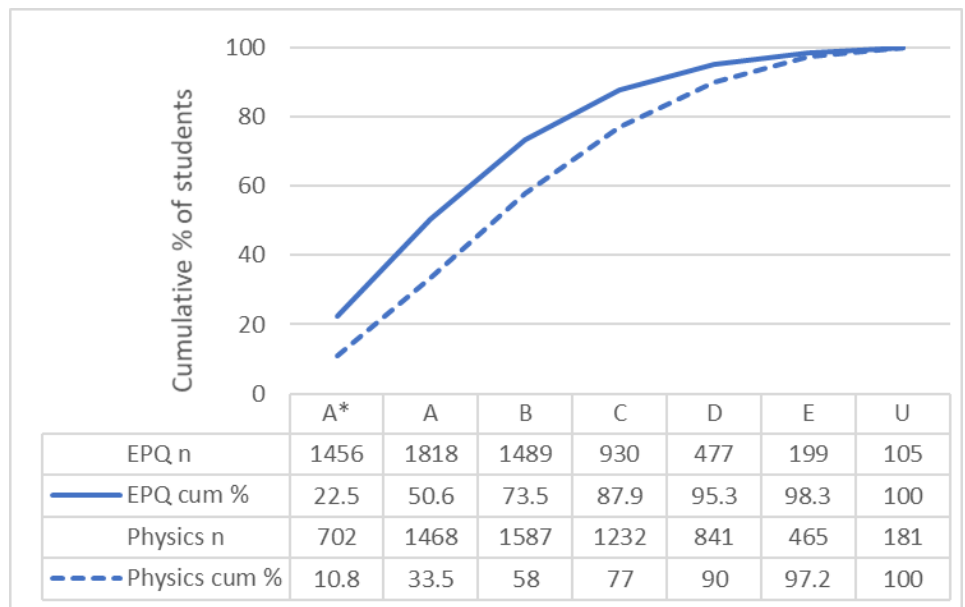


Figure 14: Cumulative grade distributions for EPQ and A level physics (students taking both qualifications only)

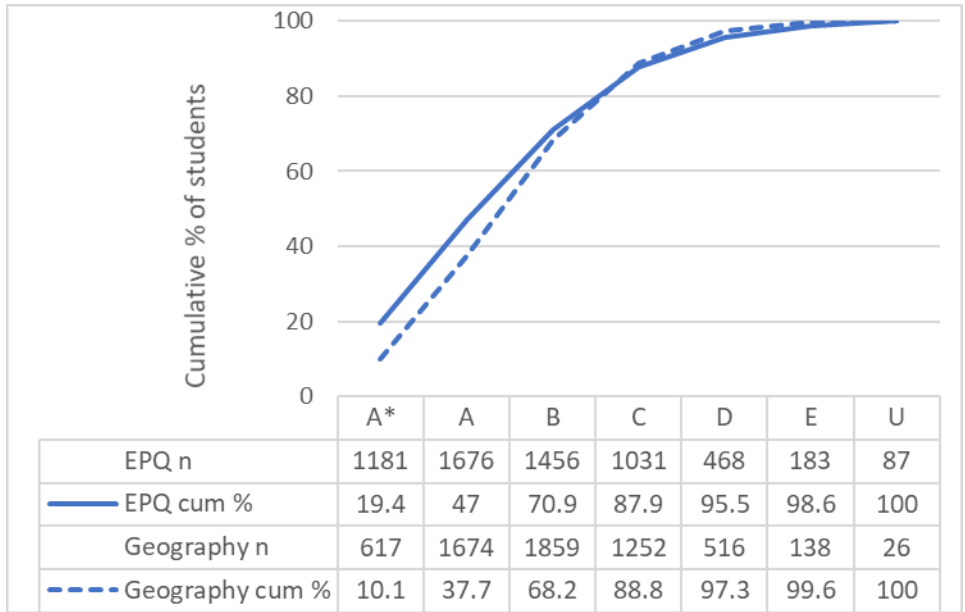


Figure 15: Cumulative grade distributions for EPQ and A level geography (students taking both qualifications only)

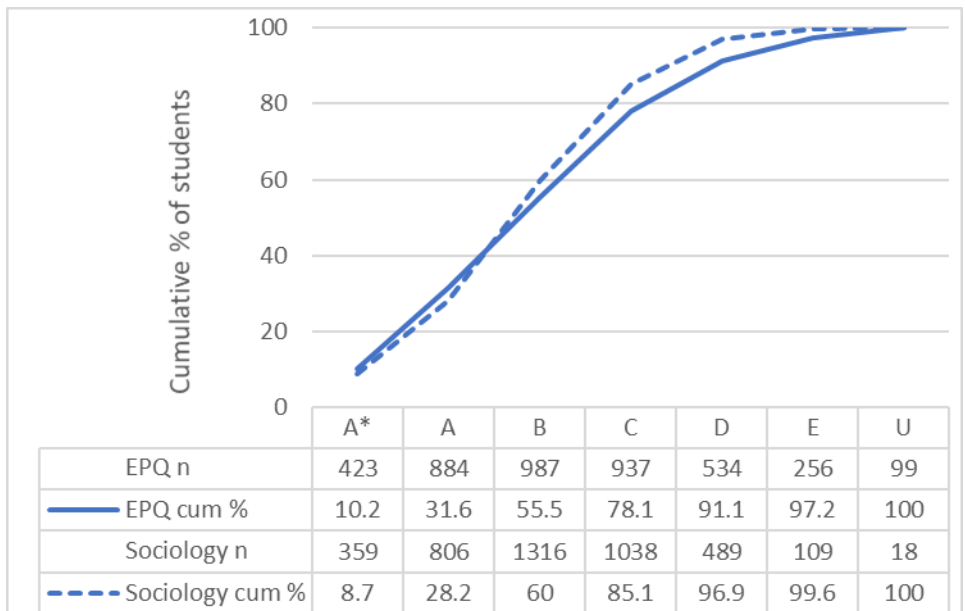


Figure 16: Cumulative grade distributions for EPQ and A level sociology (students taking both qualifications only)

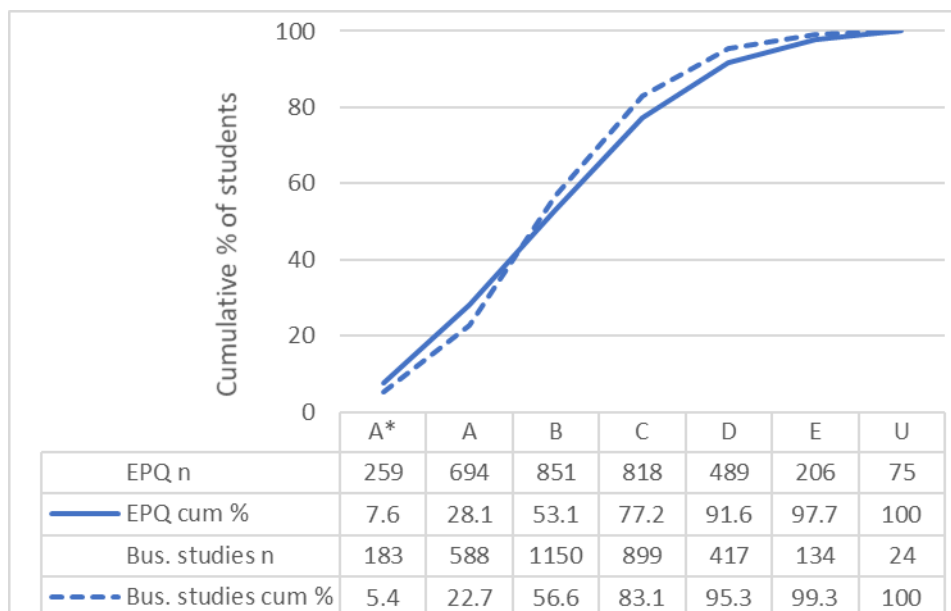


Figure 17: Cumulative grade distributions for EPQ and A level business studies (students taking both qualifications only)

These results show that EPQ was apparently⁷ easier than most of the A levels it was compared to, particularly maths and the three main sciences. The exceptions were sociology and business studies, where EPQ was apparently slightly easier at grades A* and A and was harder at grades B to E. For history, geography, and English literature, EPQ was easier at grades A* to B, but was harder at grades D and E.

Another way to investigate relative difficulty is to look at the prior attainment of students achieving each EPQ grade and compare that to the prior attainment of students achieving each grade in some popular A levels. For the measure of prior attainment, we used the Key Stage 4 (KS4) average points score. This is the average grade achieved by students in their KS4 qualifications (see footnote 3).

Figure 18 shows, for EPQ and the most popular A levels, the mean prior attainment of those achieving each grade in the subject. This shows the EPQ to be in the middle of the A level subjects in terms of difficulty. Apparently 'harder' subjects were those with higher mean KS4 attainment for those achieving each A level grade (e.g. biology, chemistry, physics, and maths). Apparently 'easier' subjects were those with lower mean KS4 attainment for those achieving each A level grade (e.g. psychology, business studies and sociology). For the remaining subjects (geography, history, and English literature) there were differences between grades, with EPQ apparently easier at higher grades and harder at lower grades.

⁷ The word 'apparently' is used here because in order to interpret these differences as differences in difficulty certain assumptions are required.

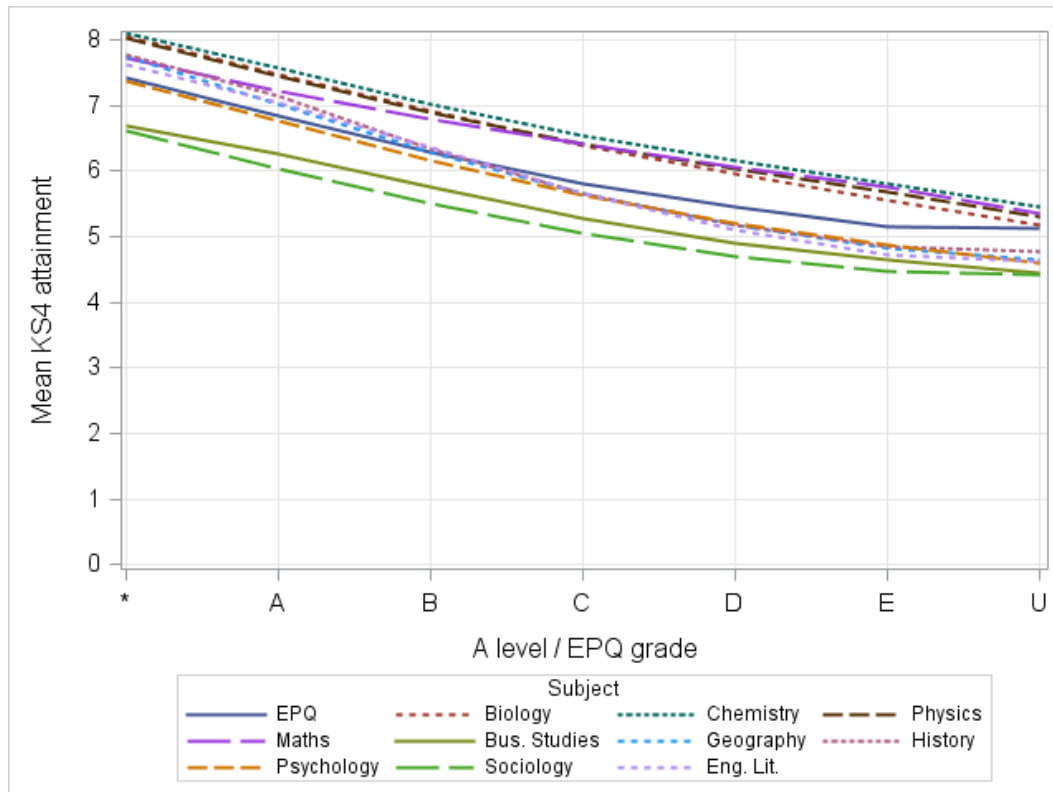


Figure 18: Mean KS4 attainment for those achieving each grade in EPQ / popular A levels

Table 5 presents the results of the analysis using the Kelly method for estimating subject difficulty. The table compares EPQ with all A level subjects with at least 1,000 candidates and is sorted by difficulty rating (high to low). The difficulty ratings can be interpreted as the adjustments that should be made to the (numerical) grades in each subject in order that, on average, examinees achieve the same average adjusted grade in their other subjects that they achieve in any particular subject.

This shows that EPQ was rated slightly below average (-0.280) in the list of A level subjects, with a similar rating to law, religious studies and D & T product design. Comparing the difficulty to that of the most popular A level subjects we can see that EPQ was easier than physics, chemistry, biology, maths, history, psychology, geography and English literature, and was harder than sociology and business studies. These results agree with those from the analysis using mean grade and cumulative grade distributions (see Table 4 and Figures 8 to 17). They were also similar results to the analysis using prior attainment (see Figure 18), although that suggested that EPQ was easier than geography, biology, history and English literature at higher grades and harder than these subjects at lower grades.

Table 5: Kelly difficulty ratings for EPQ and A level subjects with at least 1,000 candidates

Subject	All candidates	Candidates compared ⁸	Difficulty rating
Mathematics (Further)	12,765	12,759	1.003
Physics	34,114	33,903	0.863
Chemistry	51,168	50,981	0.746
Biology	59,870	59,251	0.567
Computer Studies/Computing	10,089	9,716	0.518
Mathematics	77,508	76,457	0.396
Latin	1,052	1,034	0.313
Logic/ Philosophy	2,661	2,626	0.300
Music	3,861	3,728	0.190
Accounting/Finance	2,057	1,937	0.170
German	2,698	2,639	0.115
Music Technology	1,233	1,135	0.094
French	7,414	7,248	0.078
Geology	1,133	1,097	0.029
Economics	28,314	27,810	-0.007
History	46,051	45,093	-0.080
Classical Civilisation	2,762	2,713	-0.092
Government & Politics	17,473	17,137	-0.098
Spanish	7,592	7,297	-0.120
Physical Education/Sports Studies	9,715	9,370	-0.137
Psychology	59,871	57,443	-0.141
Geography	31,478	30,552	-0.166
English Literature	36,420	35,589	-0.174
Law	10,652	10,356	-0.255
Religious Studies	15,867	15,328	-0.264
EPQ	45,687	44,099	-0.280
D&T Product Design	8,211	7,398	-0.294
English Language	13,444	12,833	-0.401
English Language & Literature	7,361	6,890	-0.415
Business Studies: Single	29,278	27,880	-0.422
Drama & Theatre Studies	9,284	8,774	-0.436
Chinese	1,918	1,813	-0.604
Sociology	34,446	31,778	-0.702
Film Studies	5,606	5,158	-0.766
Media/Film/Tv Studies	13,857	12,634	-0.874
Art & Design	5,199	4,859	-0.880
Art & Design (Fine Art)	13,816	13,046	-0.888
Art & Design (3d Studies)	1,186	1,041	-1.018
Art & Design (Textiles)	3,075	2,855	-1.028
Art & Design (Graphics)	4,734	4,315	-1.035
Art & Design (Photography)	11,431	10,134	-1.124

⁸ This is different to the total number of candidates taking the subject because there were some candidates who were excluded from the analysis because they only took one subject.

RQ3: What proportion of students start an EPQ, but do not complete it?

Table 6 lists the EPQ and A level subjects with the highest proportion of entries graded an X. Table 7 compares the percentage receiving a grade X in the EPQ with the percentages in the most popular A level subjects. Tables 8 and 9 repeat this for AS levels. This shows that EPQ had a much higher percentage of X grades than any A or AS level, with almost 1,000 candidates receiving a grade X.

Table 6: X grades for EPQ and A levels (highest grade X proportions, counts below 10 suppressed)

Subject	Cands	Grade X	% grade X
EPQ	38,419	969	2.52
Accounting / Finance	2,250	14	0.62
General Studies	11,785	23	0.20
Computing	5,502	<10	-
Mathematics (Further)	13,386	<10	-
Classical Civilisation	3,652	<10	-
Spanish	7,305	<10	-
Law	10,007	<10	-
Dance	10,127	<10	-
Film Studies	6,413	<10	-

Table 7: X grades for EPQ and A levels (most popular A levels, counts below 10 suppressed)

Subject	Cands	Grade X	% grade X
Maths	74,255	<10	-
Psychology	54,830	23	0.04
Biology	51,827	<10	-
History	47,391	<10	-
English Lit	43,565	11	0.03
Chemistry	43,080	10	0.02
EPQ	38,419	969	2.52
Geography	31,536	<10	-
Sociology	30,394	12	0.04
Physics	29,760	<10	-

Table 8: X grades for EPQ and AS levels (highest grade X proportions, counts below 10 suppressed)

Subject	Cands	Grade X	% grade X
EPQ	38,419	969	2.52
Art & Design (Textiles)	1,080	26	2.41
Art & Design	2,258	39	1.73
Art & Design (Photography)	5,156	77	1.49
Art & Design (Fine Art)	4,244	48	1.13
Music Technology	1,098	11	1.00
Art & Design (Graphics)	1,524	15	0.98
Mathematics (Further)	5,895	47	0.80
Accounting / Finance	2,158	17	0.79
Creative Writing	1,228	<10	-

Table 9: X grades for EPQ and A levels (most popular AS levels, counts below 10 suppressed)

Subject	Cands	Grade X	% grade X
EPQ	38,419	969	2.52
Maths	32,113	135	0.42
Psychology	28,231	124	0.44
Biology	26,334	80	0.30
Chemistry	23,855	58	0.24
Physics	20,389	63	0.31
General Studies	19,719	57	0.29
History	16,988	55	0.32
English Lit	15,157	61	0.40
Sociology	13,784	95	0.69

Table 10 presents the number of students who took an EPQ and received a grade X, broken down by background characteristics. For example, there were 533 female students and 436 male students who received a grade X, which is 2.30% and 2.86% of female and male EPQ students respectively.

Amongst those taking an EPQ, males, students attending a college, black students, and those whose first language was not English were most likely to receive a grade X. Students attending selective schools, white students, English speakers, and students attending single sex schools were least likely to get a grade X. The numbers of students with SEN who received a grade X were too low to be presented. However, as the percentage of students without SEN who received a grade X (2.11%) was below the overall percentage of students with grade X (2.52%), we can infer that the percentage of SEN students receiving a grade X was higher than the overall percentage.

Table 10: EPQ students with grade X, by background characteristics (dashes indicate suppression due to low counts)

Category		EPQ candidates	No. receiving grade X	% receiving grade X
Gender	Female	23,169	533	2.30
	Male	15,250	436	2.86
School type	College	9,860	314	3.18
	Comprehensive	18,267	458	2.51
	Independent	4,035	99	2.45
	Selective	5,161	74	1.43
	Other	894	17	1.90
Ethnic group	Asian	2,517	60	2.38
	Black	1,015	45	4.43
	Chinese	208	-	-
	Mixed	946	22	2.33
	White	18,416	349	1.90
	Other	339	-	-
	Unclassified	254	14	5.51
First language	English	20,629	420	2.04
	Other	2,990	83	2.78
	Unclassified	76	0	0.00
SEN status	None	22,733	479	2.11
	SEN, no statement	828	-	-
	SEN with statement	134	-	-
School gender	Boys	1,270	22	1.73
	Girls	3,186	52	1.63
	Mixed	33,963	895	2.64

Table 11 compares the mean KS5 point score⁹ for grade X and non-grade X students. This shows that the grade X students had a lower mean KS5 points score on average.

Table 11: Mean KS5 point score for grade X and other students

Grade X for EPQ	Cands	Mean of KS5 points score	SD of mean A level
No	37,449	235.82	37.02
Yes	969	215.08	41.97

⁹ This was calculated by averaging the points scores allocated to grades achieved in all KS5 qualifications which were at least equivalent in size to an A level. For example, the scores for A level grades were: A*=300, A=270, B=240, C=210, D=180, E=150, U=0.

Discussion

The results presented in this report have shown that the uptake of EPQ continues to increase, with over 45,000 entries in 2018/19, putting it above the 6th most popular A level subject. Students taking EPQ were more likely to be female, to attend independent or selective schools, to be high attainers, have low levels of deprivation, speak English as a first language, and attend a girl's school. Since the previous report which looked at uptake by student characteristics in 2014/15 (Gill, 2016), there has been a significant increase in the percentage of EPQ students attending independent schools (from 11.4% to 17.2%) and selective schools (from 6.1% to 13.1%), and a fall in the percentage attending colleges (from 30.1% to 17.5%). This suggests that a lot of the increase in entries was due to more independent and selective school students taking it, perhaps because of the increased value placed on the qualification by HE institutions.

It is worth noting that some schools require students to take EPQ as part of their KS5 offering (see, for example, <https://www.hillsroad.ac.uk/sixthform/student-life/extended-project>). Williamson & Vitello (2018) surveyed school heads of department and found that 14% of them agreed that it was school policy for all students to take an EPQ. This may explain some of the uptake patterns described above if, for example, independent or selective schools were more likely to require all students to take an EPQ.

Correlations between EPQ grade and grades in the most popular A levels were all reasonably high, between 0.364 and 0.504. This suggests a good relationship between EPQ grade and A level grade. Apart from physics, the correlations were all higher than the equivalent correlations in 2014/15 recorded in Gill (2016).

The different methods for comparing the difficulty of EPQ and A level subjects all generated similar conclusions. The comparisons of mean grades and cumulative grade distributions in EPQ and the most popular A level subjects found that EPQ was apparently easier than all A level subjects apart from sociology and business studies. However, for some A level subjects there were differences between grades, with EPQ being apparently easier at high grades and harder at low grades.

When estimating subject difficulty by comparing the mean KS4 attainment for candidates achieving each A level / EPQ grade, we found EPQ to be in the middle of the most popular A level subjects. Again, there were some differences depending on the grade being compared, with the general pattern being that EPQ was easier at high grades and harder at low grades.

We also found EPQ to be approximately in the middle of A level subjects, when using Kelly's method for estimating subject difficulty. The results of these comparisons of subject difficulty suggest that EPQ is not particularly difficult and should therefore be within the reach of most students who want to progress to HE. However, we do need to be cautious in making these comparisons of subject difficulty. There are many different methods for such comparisons (see Coe, 2007), all of which must first cope with the issue of defining 'difficulty' and secondly deal with the large amount of missing data (the grades of students in the subjects they didn't take). This second point was illustrated by Bramley (2016), who showed how subject choice can affect the apparent difficulty of different subjects. When students choose subjects that measure something different (from typical academic subjects) because they have a particular ability in it (e.g., Art), then these will tend to seem easier. It is possible that this would apply to the EPQ, because students get to choose their own project and will therefore be likely to choose something that they are interested in or have a talent in.

EPQ students were much more likely to drop-out before finishing than students taking other A or AS level subjects. It is not clear why this was the case, but one possibility was that some students started an EPQ in order to try and get a reduced offer from HE institutions but did not complete it because they were unable to find the time around their other study. It may also be the case that EPQ is seen as less important than A levels, so if a student is feeling over-worked they may decide to drop the EPQ instead of dropping an A level. It is worth noting that 76.3% of students who achieved a grade X in their EPQ progressed to HE, compared with 66.8% of students who did not take EPQ (Gill, 2022), so dropping out did not seem particularly detrimental to their chances of progressing. However, for students whose offer included the EPQ, dropping out could lead to them not getting a place at their preferred institution.

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