

The re-sitting patterns of a cohort of A level students

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Introduction

This report presents the re-sitting patterns of a cohort of A level students who began their studies (i.e. were in year 12) in the academic year 2012/13. Re-sitting here refers to a re-certification of the whole qualification rather than re-sitting individual units during the course. Students are most likely to re-sit A levels when they fail to achieve the grades required for university entry.

This is an interesting area for investigation because there have been a number of changes to A levels in recent years, with further changes scheduled to take effect over the next two years. For example, the removal of the January examination session for A levels in 2014 reduced the number of opportunities students have to re-sit individual units, which may have increased their likelihood of re-sitting the whole qualification. Furthermore, from first teaching in 2015, a number of A level subjects became completely linear (and 'de-coupled' from the AS level), meaning it will no longer be possible to re-sit individual units in these subjects. A second tranche of subjects will be made linear from 2016, and the remaining subjects from 2017. These reforms may increase the number of whole qualification re-sits because it will not be possible to re-sit individual units during the course.

The data analysed in this report was prior to the introduction of the linear A levels and thus can serve as a baseline year, allowing comparisons to be made in any future analyses. Data is presented on all A level subjects, with a focus on the five subjects which were re-sat the most.

Data

The data for this report come from the National Pupil Databases (NPD) for the 2013/14 and 2014/15 academic years. The NPD is compiled for the Department for Education (DfE) from data supplied by the awarding bodies. It contains candidate details, such as gender and year group, and the national examination results of all pupils in schools in England up to the age of 19. The Key Stage 5 (KS5) extracts of the NPD were used for this analysis. These consist of results for all students aged 16-18 at the start of the academic year in question who sat at least one qualification equivalent in size to an A level in that year.

It was necessary to use both the 2013/14 and 2014/15 extracts to be able to capture all re-sits for this cohort of students. Some students beginning A level studies in 2012/13 took an A level in year 12 and re-sat in year 13 (which will appear in the 2013/14 extract), but some took an A level in year 13 and then re-sat in year 14 (which will appear in the 2014/15 extract).

For the purpose of this report a re-sit is defined as a candidate who entered an A level subject more than once in different sessions, without regard to the specification and/or awarding body s/he had chosen.

Results

An important first step in examining these results is to determine how prevalent re-sitting is for A levels. For the cohort in year 12 in the autumn of 2012, 736,264 total A-levels were taken, and slightly over 4% of these were taken more than once. In comparison, GCSE resit rates were slightly higher, at 5.9% for the summer 2013 exam session and 7.4% for the summer 2014 exam session (Zanini, 2015).

Because students would have to wait an entire year to re-sit an A level, and they are typically taken in Year 13 at the end of two years of study (i.e., just before entering university), one might expect a greater proportion of re-sits among those candidates who first took an exam earlier than usual. Indeed, when re-sits are broken down by first exam year, the results show that despite the greatest number of re-sits occurring in 2015 (i.e., among those first sitting an A-level in 2014 in Year 13), the proportion of candidates re-sitting was much higher among those first sitting A-levels in Year 12 or earlier. Results for total re-sits and re-sits by first year of entry are displayed in Table 1.

Table 1. Candidates re-sitting A-levels by first year of entry

Year of first entry for subject	Number of entries	Number re-sat*	Percent re-sat (%)
2012 or earlier (Year 11 or lower)	1643	337	20.51
2013 (Year 12)	19547	6468	33.09
2014 (Year 13)	715074	23035	3.22
Total	736264	29840	4.05

*This calculation is based on the number of entries that were re-sat at least once; where candidates re-sat an exam two or three times this is only counted as one resit.

Because the most common reason to re-sit an A-level would be to improve one's grade, one would also expect higher re-sit rates for candidates with lower original grades. Table 2 presents the frequency and percentage of students re-sitting A-levels grouped by original grade achieved at first sitting (regardless of the year of first entry).

Table 2. Percentage of resits by original grade

Original grade ¹	Number of entries	Number of resits	Percent re-sat (%)
A*	62432	719	1.15
A	131050	1310	1.00
B	190959	7035	3.68
C	177475	9400	5.30
D	111214	7497	6.74
E	48640	2953	6.07
Q	9	3	33.33
U	13876	718	5.17
X	609	205	33.66

Given that candidates do seem to be more likely to re-sit if they received a lower grade the first time they took an A-level, a natural follow-up question is whether the re-sit was successful. In other words, were students able to improve their grades by re-sitting A-levels? Table 3 presents the first and last grades achieved on A-levels for those who took the same A-level more than once. It appears that candidates were often successful, with 40-70% of re-sitters achieving a higher final grade than original grade (excluding original grades Q and X). Even more encouraging is that candidates with lower starting grades were most likely to improve with a re-sit.

It is interesting that there were a substantial number of students (n=719) who achieved an A* grade the first time, yet still re-sat the qualification. Further investigation of these re-sits revealed them to be almost all in Mathematics (n=707). The likelihood is that they were mostly (if not all) due to a certification rule which is particular to Mathematics and Further Mathematics A levels. Some units can be used to certificate for either Mathematics or Further Mathematics (although not both) and thus students who take both qualifications are able to choose the combination of units in both subjects that maximise their overall grades or marks. We found that some of these students certificated for Mathematics in year 12, before going on to take units that would allow certification for Further Mathematics in year 13. At the end of year 13 they were then able to swap some units between the two qualifications in order to maximise their chances of achieving an A* in Further Mathematics, *but only* if they re-certificated in Mathematics. This will be counted as a re-sit, despite the fact that these students are only re-certificating to maximise their marks in a different subject.

It was not possible to identify which of the re-sits fell into this category so they are included in all the tables.

¹ Regular grades are A* - E or U. However, some candidates receive a grade Q or X. Grade Q means that clarifications are needed by the exam board in order to grade the exam. Grade X grade signifies that the candidate has completed only part of the course/exam and so an appropriate grade cannot be given. Both X and Q are temporary grades and are normally replaced with a regular grade (A* - E or U) later.

Table 3. First and last grades achieved by re-sits

		Last grade recorded									
		A*	A	B	C	D	E	Q	U	X	Total
Grade when first sat a subject	A*	715 99.44%	1 0.14%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.14%	0 0.00%	2 0.28%	719
	A	524 40.00%	774 59.08%	3 0.23%	1 0.08%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	8 0.61%	1310
	B	437 6.21%	3130 44.49%	3434 48.81%	11 0.16%	1 0.01%	0 0.00%	1 0.01%	1 0.01%	20 0.28%	7035
	C	140 1.49%	786 8.36%	4467 47.52%	3956 42.09%	25 0.27%	3 0.03%	1 0.01%	0 0.00%	22 0.23%	9400
	D	28 0.37%	201 2.68%	1227 16.37%	3272 43.64%	2721 36.29%	22 0.29%	1 0.01%	11 0.15%	14 0.19%	7497
	E	13 0.44%	48 1.63%	173 5.86%	580 19.64%	1174 39.76%	945 32.00%	0 0.00%	8 0.27%	12 0.41%	2953
	Q	0 0.00%	0 0.00%	1 33.33%	1 33.33%	0 0.00%	1 33.33%	0 0.00%	0 0.00%	0 0.00%	3
	U	4 0.56%	10 1.39%	36 5.01%	79 11.00%	124 17.27%	247 34.40%	0 0.00%	215 29.94%	3 0.42%	718
	X	27 13.17%	29 14.15%	47 22.93%	47 22.93%	35 17.07%	16 7.80%	0 0.00%	3 1.46%	1 0.49%	205
	Total	1888	4979	9388	7947	4080	1234	4	238	82	29840

One might wonder whether re-sits are concentrated among a few subjects (such as those that most influenced university admissions) or whether they tend to be equally distributed across many subjects. Table 4 was constructed to answer this question. It lists the number of resits and the total number of exams taken in each A-level subject, along with the subject-specific percentage of exams re-sat.

However, the number of candidates taking A levels varies widely across subjects, so different statistics are needed to determine which subjects are contributing to the greatest number of resits. Therefore, the far-right column in Table 4 presents a second percentage: the percentage of all re-sits that were made up of exams in that subject. For example, over 13% of candidates re-sat the Bengali A-level (the highest percentage of re-sits for any subject), but these students accounted for only 0.01% of all resits on A-levels.

Table 4. Number of candidates re-sitting each subject

A-level subject	Entries (n)	Resits (n)	Percent of entries re-sat	Percent of all resits
Accounting/Finance	2565	103	4.02	0.35
Additional Mathematics	81	0	0.00	0.00
Ancient History	610	20	3.28	0.07
Anthropology	174	7	4.02	0.02
Applied Art & Design	280	0	0.00	0.00
Applied Business	5741	116	2.02	0.39
Applied Engineering	222	2	0.90	0.01
Applied ICT	5224	100	1.91	0.34
Applied Science	2571	58	2.26	0.19
Arabic	379	30	7.92	0.10
Archaeology	351	7	1.99	0.02
Art & Design	6610	53	0.80	0.18
Art & Design (3d Studies)	620	2	0.32	0.01
Art & Design (Critical Studies)	253	0	0.00	0.00
Art & Design (Fine Art)	12808	76	0.59	0.25
Art & Design (Graphics)	4134	17	0.41	0.06
Art & Design (Photography)	12146	76	0.63	0.25
Art & Design (Textiles)	3322	13	0.39	0.04
Bengali	29	4	13.79	0.01
Biology	52343	3688	7.05	12.36
Business Studies: Single	22645	754	3.33	2.53
Business Studies & Economics	1940	9	0.46	0.03
Chemistry	44161	3056	6.92	10.24
Chinese	2508	293	11.68	0.98
Classical Civilisation	3555	129	3.63	0.43
Classical Greek	252	4	1.59	0.01
Classics (General)	266	8	3.01	0.03
Communication Studies	1587	6	0.38	0.02
Computer Studies/Computing	3622	140	3.87	0.47
Critical Thinking	646	11	1.70	0.04
D&T Food Technology	1110	15	1.35	0.05
D&T Product Design	8743	184	2.10	0.62
D&T Systems & Control	244	4	1.64	0.01
D&T Textiles Technology	1575	17	1.08	0.06
Dance	1843	21	1.14	0.07
Drama & Theatre Studies	11592	182	1.57	0.61
Dutch	112	10	8.93	0.03
Economics	21573	1209	5.60	4.05
Electronics	871	24	2.76	0.08
English Language	21463	466	2.17	1.56
English Language & Literature	12979	313	2.41	1.05
English Literature	41552	953	2.29	3.19
Environmental Science	940	39	4.15	0.13
Expressive Arts & Performance Studies	627	7	1.12	0.02
Film Studies	5736	62	1.08	0.21
French	8829	286	3.24	0.96
General Studies	24640	222	0.90	0.74
Geography	28128	959	3.41	3.21
Geology	1996	67	3.36	0.22
German	3647	134	3.67	0.45
Government & Politics	11682	464	3.97	1.55
Gujarati	15	0	0.00	0.00
Health & Social Care	5592	112	2.00	0.38
History	44339	1360	3.07	4.56
History of Art	830	38	4.58	0.13
Home Economics: Food	303	6	1.98	0.02
Humanities: Single	1	0	0.00	0.00

Table 4. Number of candidates re-sitting each subject

A-level subject	Entries (n)	Resits (n)	Percent of entries re-sat	Percent of all resits
Information & Communications Technology	6746	201	2.98	0.67
Italian	652	30	4.60	0.10
Japanese	195	10	5.13	0.03
Latin	1260	21	1.67	0.07
Law	9864	335	3.40	1.12
Leisure & Recreation	407	5	1.23	0.02
Logic/ Philosophy	2318	89	3.84	0.30
Mathematics	71610	6589	9.20	22.08
Mathematics (Further)	12483	426	3.41	1.43
Mathematics (Pure)	44	2	4.55	0.01
Mathematics (Statistics)	620	30	4.84	0.10
Media/Film/Tv Studies	19279	206	1.07	0.69
Media: Communication & Production	313	3	0.96	0.01
Modern Greek	119	8	6.72	0.03
Modern Hebrew	37	2	5.41	0.01
Music	4648	139	2.99	0.47
Music Technology	2310	44	1.90	0.15
Other Classical Languages	23	0	0.00	0.00
Performing Arts	1054	9	0.85	0.03
Persian	166	10	6.02	0.03
Physical Education/Sports Studies	10930	349	3.19	1.17
Physics	30682	1682	5.48	5.64
Polish	739	52	7.04	0.17
Portuguese	277	29	10.47	0.10
Psychology	49173	1880	3.82	6.30
Punjabi	130	8	6.15	0.03
Religious Studies	19129	600	3.14	2.01
Russian	947	72	7.60	0.24
Science in Society	83	1	1.20	0.00
Social Science: Citizenship	571	10	1.75	0.03
Sociology	26509	732	2.76	2.45
Spanish	6397	232	3.63	0.78
Travel & Tourism	1446	14	0.97	0.05
Turkish	416	38	9.13	0.13
Urdu	350	9	2.57	0.03
Use of Mathematics	1140	28	2.46	0.09
World Development	590	9	1.53	0.03

Next, the subjects leading to the most A-level resits were examined in more detail. For those subjects that the greatest numbers of students re-sit, do re-sit rates increase as original grades decrease? And are these students making the right decision---do their grades improve after another attempt? Tables 5.1-5.10 examine these questions for the five subjects with the highest numbers of resits. For each subject, two tables are reported: one with the re-sit rates for each possible original grade (similar to Table 2), and a second with re-sits by original and final grades (similar to Table 3).

For example, Mathematics accounted for the highest number of re-sits, at 22% of all re-sat exams. Table 5.1 reports the number of candidates scoring each possible grade (at first attempt) and the number of these students who later re-sat the qualification. The re-sit rate, or percentage of entries re-sat for each original grade, is also presented in Table 5.1. Then, for just those students who re-sat Mathematics, students' original and final grades are reported in Table 5.2. Similar to Table 3, Table 5.2 reports, for each original grade, the percentage achieving each possible final grade in Mathematics A-level.

The same descriptive analyses in Tables 5.1 and 5.2 for Mathematics are replicated in Tables 5.3 and 5.4 for Biology, in Table 5.5 and 5.6 for Chemistry, in Tables 5.7 and 5.8 for Psychology, and in Tables 5.9 and 5.10 for Physics.

Table 5.1. Percentage of resits by original grade in Mathematics

Original grade	Number of exams	Number of resits	Percent re-sitting (%)
A*	13183	707	5.36
A	18064	927	5.13
B	15774	1690	10.71
C	11013	1492	13.55
D	7569	1120	14.80
E	4209	473	11.24
U	1743	145	8.32
X	55	35	63.64

Table 5.2. First and last grades achieved by re-sits in Mathematics

		Last grade recorded									
		A*	A	B	C	D	E	Q	U	X	Total
Grade when first sat Mathematics	A*	703 99.43%	1 0.14%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 0.14%	0 0.00%	2 0.28%	707
	A	393 42.39%	529 57.07%	1 0.11%	1 0.11%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	3 0.32%	927
	B	183 10.83%	855 50.59%	647 38.28%	1 0.06%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	4 0.24%	1690
	C	43 2.88%	218 14.61%	784 52.55%	444 29.76%	2 0.13%	0 0.00%	0 0.00%	0 0.00%	1 0.07%	1492
	D	11 0.98%	71 6.34%	302 26.96%	429 38.30%	305 27.23%	2 0.18%	0 0.00%	0 0.00%	0 0.00%	1120
	E	5 1.06%	16 3.38%	38 8.03%	120 25.37%	143 30.23%	146 30.87%	0 0.00%	4 0.85%	1 0.21%	473
	Q	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0
	U	0 0.00%	2 1.38%	4 2.76%	23 15.86%	30 20.69%	43 29.66%	0 0.00%	41 28.28%	2 1.38%	145
	X	8 22.86%	8 22.86%	8 22.86%	4 11.43%	3 8.57%	2 5.71%	0 0.00%	1 2.86%	1 2.86%	35
Total	1346	1700	1784	1022	483	193	1	46	14	6589	

Table 5.3. Percentage of resits by original grade in Biology

Original grade	Number of exams	Number of resits	Percent re-sitting (%)
A*	5582	2	0.04
A	9652	32	0.33
B	11958	790	6.61
C	10559	1177	11.15
D	8374	1115	13.32
E	4989	474	9.50
Q	1	0	0.00
U	1200	91	7.58
X	28	7	25.00

Table 5.4. First and last grades achieved by re-sits in Biology

		Last grade recorded								
		A*	A	B	C	D	E	U	X	Total
Grade when first sat Biology	A*	2 100.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	2
	A	11 34.38%	21 65.63%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	32
	B	49 6.20%	380 48.10%	358 45.32%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	3 0.38%	790
	C	23 1.95%	93 7.90%	574 48.77%	483 41.04%	3 0.25%	0 0.00%	0 0.00%	1 0.08%	1177
	D	3 0.27%	29 2.60%	197 17.67%	463 41.52%	412 36.95%	7 0.63%	2 0.18%	2 0.18%	1115
	E	0 0.00%	5 1.05%	19 4.01%	79 16.67%	190 40.08%	180 37.97%	1 0.21%	0 0.00%	474
	U	0 0.00%	0 0.00%	1 1.10%	5 5.49%	14 15.38%	37 40.66%	33 36.26%	1 1.10%	91
	X	0 0.00%	1 14.29%	2 28.57%	2 28.57%	2 28.57%	0 0.00%	0 0.00%	0 0.00%	7
Total	88	529	1151	1032	621	224	36	7	3688	

Table 5.5. Percentage of resits by original grade in Chemistry

Original grade	Number of exams	Number of resits	Percent re-sitting (%)
A*	4384	2	0.05
A	10802	19	0.18
B	11329	799	7.05
C	8111	1031	12.71
D	5423	764	14.09
E	3157	354	11.21
Q	2	2	100.00
U	933	75	8.04
X	20	10	50.00

Table 5.6. First and last grades achieved by re-sits in Chemistry

		Last grade recorded									
		A*	A	B	C	D	E	Q	U	X	Total
Grade when first sat Chemistry	A*	2 100.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	2
	A	8 42.11%	11 57.89%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	19
	B	31 3.88%	359 44.93%	402 50.31%	0 0.00%	0 0.00%	0 0.00%	1 0.13%	1 0.13%	5 0.63%	799
	C	11 1.07%	104 10.09%	492 47.72%	415 40.25%	6 0.58%	1 0.10%	0 0.00%	0 0.00%	2 0.19%	1031
	D	3 0.39%	20 2.62%	145 18.98%	333 43.59%	257 33.64%	3 0.39%	0 0.00%	1 0.13%	2 0.26%	764
	E	0 0.00%	5 1.41%	28 7.91%	81 22.88%	135 38.14%	101 28.53%	0 0.00%	2 0.56%	2 0.56%	354
	Q	0 0.00%	0 0.00%	1 50.00%	1 50.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	2
	U	0 0.00%	0 0.00%	3 4.00%	4 5.33%	14 18.67%	25 33.33%	0 0.00%	29 38.67%	0 0.00%	75
	X	0 0.00%	0 0.00%	1 10.00%	2 20.00%	5 50.00%	2 20.00%	0 0.00%	0 0.00%	0 0.00%	10
	Total	55	499	1072	836	417	132	1	33	11	3056

Table 5.7. Percentage of resits by original grade in Psychology

Original grade	Number of exams	Number of resits	Percent re-sitting (%)
A*	2515	0	0.00
A	6188	8	0.13
B	12525	337	2.69
C	12880	590	4.58
D	9194	613	6.67
E	4404	234	5.31
U	1397	70	5.01
X	70	28	40.00

Table 5.8. First and last grades achieved by re-sits in Psychology

		Last grade recorded								
		A*	A	B	C	D	E	U	X	Total
Grade when first sat Psychology	A*	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0
	A	2 25.00%	5 62.50%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 12.50%	8
	B	15 4.45%	128 37.98%	194 57.57%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	337
	C	3 0.51%	27 4.58%	248 42.03%	306 51.86%	3 0.51%	0 0.00%	0 0.00%	3 0.51%	590
	D	1 0.16%	12 1.96%	74 12.07%	295 48.12%	227 37.03%	0 0.00%	2 0.33%	2 0.33%	613
	E	1 0.43%	5 2.14%	13 5.56%	38 16.24%	95 40.60%	80 34.19%	0 0.00%	2 0.85%	234
	U	0 0.00%	0 0.00%	3 4.29%	10 14.29%	15 21.43%	23 32.86%	19 27.14%	0 0.00%	70
	X	0 0.00%	2 7.14%	7 25.00%	5 17.86%	10 35.71%	4 14.29%	0 0.00%	0 0.00%	28
	Total	22	179	539	654	350	107	21	8	1880

Table 5.9. Percentage of resits by original grade in Physics

Original grade	Number of exams	Number of resits	Percent re-sitting (%)
A*	3425	0	0.00
A	6467	21	0.32
B	6789	302	4.45
C	5573	519	9.31
D	4397	496	11.28
E	3057	277	9.06
U	957	61	6.37
X	17	6	35.29

Table 5.10. First and last grades achieved by re-sits in Physics

		Last grade recorded								Total
		A*	A	B	C	D	E	U	X	
Grade when first sat Physics	A*	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0
	A	7 33.33%	13 61.90%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 4.76%	21
	B	8 2.65%	127 42.05%	167 55.30%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	302
	C	4 0.77%	47 9.06%	226 43.55%	239 46.05%	3 0.58%	0 0.00%	0 0.00%	0 0.00%	519
	D	2 0.40%	15 3.02%	96 19.35%	208 41.94%	174 35.08%	1 0.20%	0 0.00%	0 0.00%	496
	E	0 0.00%	2 0.72%	23 8.30%	48 17.33%	98 35.38%	102 36.82%	0 0.00%	4 1.44%	277
	U	0 0.00%	0 0.00%	1 1.64%	5 8.20%	7 11.48%	20 32.79%	28 45.90%	0 0.00%	61
	X	1 16.67%	0 0.00%	1 16.67%	2 33.33%	1 16.67%	1 16.67%	0 0.00%	0 0.00%	6
	Total	22	204	514	502	283	124	28	5	1682

Reference

Zanini, N. (2015). *Re-sitting patterns at GCSE across subjects in 2013 and 2014*. Statistics Report Series No. 93. Cambridge Assessment