

GCSE 2021
Another Year of Teacher Assessment

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University of Buckingham, August 2021

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Summary

The GCSE grades awarded in 2021, as in 2020, will be decided by teachers, so what happened last year may well be a guide to what will happen.

In 2020 there were:

- Higher grades at all levels – the pass rate hit 100%, 7/A grades and above rose from 20.8% to 26.2%, and 4/C grades and above from 67.3% to 76.3%.
- Grades increased in every subject, ranging from 15.1 percentage points in Engineering and Economics, and 14.9 pp in performing/expressive arts to 2.9 pp in the science double award, 3.9 pp in mathematics and 6.1 pp in English Language. The spread of grades awarded across subjects narrowed with the main beneficiaries being the performing arts and other non-core subjects.
- Girls dominated GCSE exams, 30.2% achieving top grades in 2020 with boys eight percentage points behind, up from the 6.2 points in 2019. This has been the trend from the start of GCSEs in 1988,
- Of the 30 most-frequently taken GCSE subjects in the UK, boys were ahead in only four: other sciences (3.3 pp); physics (2.5 pp); maths (0.3 pp); and statistics (0.2 pp). In contrast, girls were ahead by margins of 32.8 points in engineering, 20.6 pp in art & design, and 18.6 pp in design & technology, as well as the other subjects, including a massive lead of 13.3 pp in English.
- Wales' teachers were more generous than those in England or Northern Ireland resulting it reducing the gaps compared with what they were when the grades were decided by exams.
- The percentage entering the core subjects in EBacc has risen from 21.8% in 2010 to 39.5% in 2020, with at the last count 86.5% taking four of the components, the exception being a foreign language. There was a steep decline in French and German entries when they became optional, and although Spanish continues to grow it has not compensated.

If 2021 follows a similar pattern, and with teachers once again deciding grades, there are good reasons for thinking there will be implications for the future of GCSEs.

With another bumper crop of top GCSE grades, the future of exams at age16 is likely to come under threat. There is already a pressure group to ditch them and if parents get a liking for plentiful top grades they may become involved.

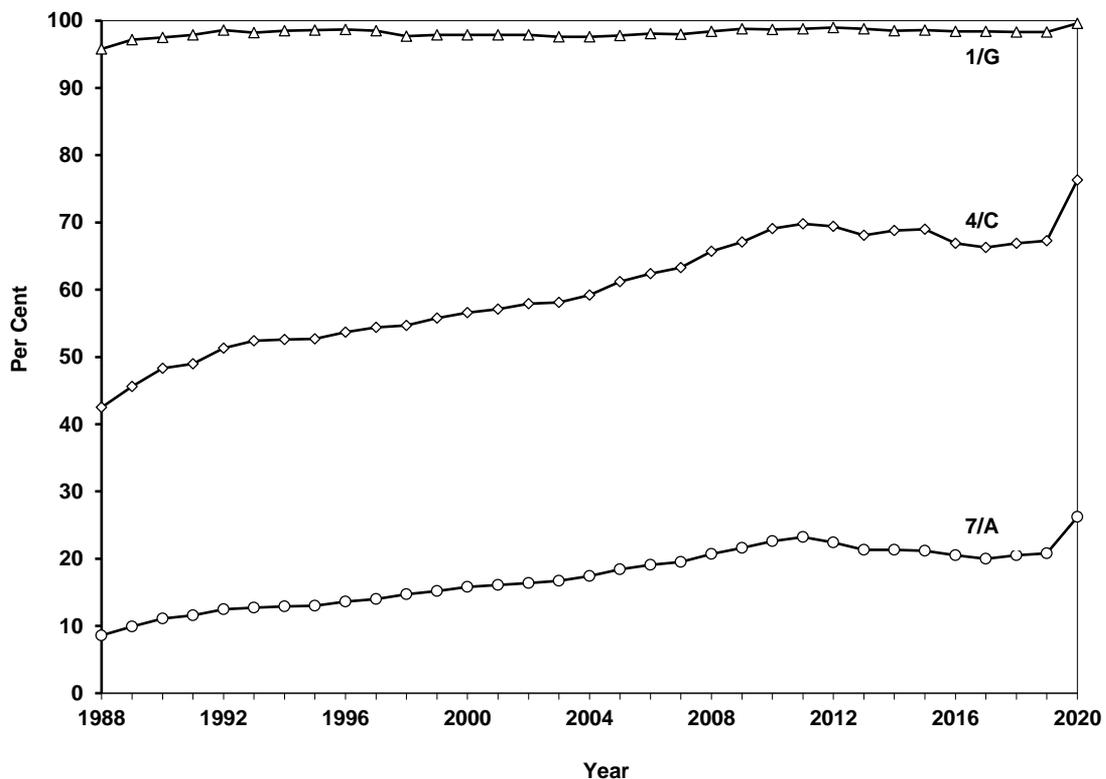
The different labels used in England, Wales and Northern Ireland and the different pass rates, exam boards and regulators calls into question whether it is reasonable to continue to treat them as the same award.

The excellent performance of girls could also come into the spotlight given their evident superiority in GCSEs and A-levels.

1. Steep Rise in Grades

- 1.1. The enforced switch to teacher-assessed grades in 2020 completely changed the pattern of results. Up to 2019 there had been two phases: a continuing small increase from year to year, for example at A grade and above, passes rose from 8.6% in 1988 to 23.2% in 2011, when the rate was reined in by Ofqual and it fell somewhat to become 20.8% in 2019. But allowing teachers to decide in 2020 led a surge to 26.2% in A grades. The overall pass rate and that at C grade and above followed similar paths, with a marked teacher-assessed bounce.

Chart 1.1: Trends in UK GCSE Grades



- 1.2. It was not only overall grades that bounded upwards. Chart 1.2 shows that the pass rate at Grade 7/A and above increased in every subject. The hikes ranged from 15.1 percentage points in Engineering, similarly in Economics, and 14.9 pp in performing/expressive arts down to 2.9 pp in the science double award, 3.9 pp in mathematics and 6.1pp in English Language.
- 1.3. When the subjects were ranked by the percentages of top grades, the order reflected both whether the subject was compulsory and the size of the intake. Subjects at the top were optional and tended to be smaller, while those at the bottom were the compulsory subjects of English, maths, and science. Of the ten subjects at the top of the ranking, nine had increases of close to ten per cent, whereas, as reported in para 1.2 it was much lower in the core subjects.

Chart 1.2: Comparison of 7/A Grades in 2020 and 2019

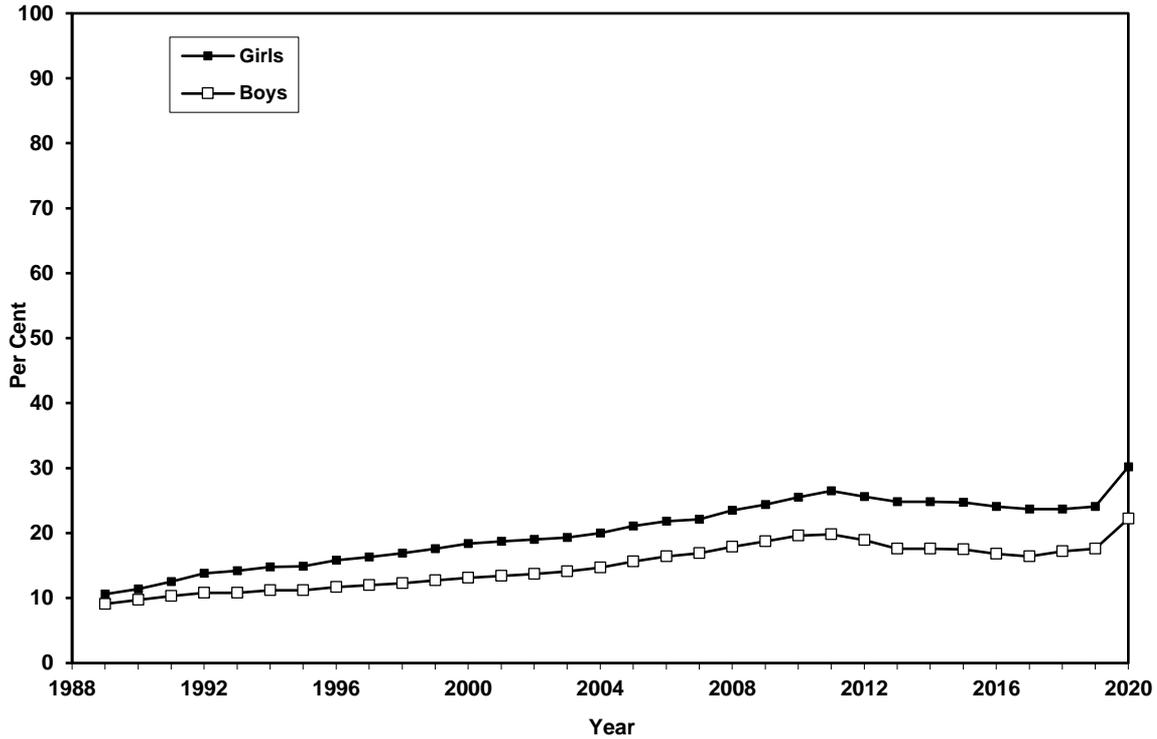
JCQ Subject Categories	2020		2019		Increase
	%7& Above	Rank	%7& Above	Rank	
Classical subjects	75.1	1	64.5	1	10.6
Other Modern Languages	62.1	2	60	2	4.1
Other Sciences	59.8	3	45.5	3	14.3
Biology	54.0	4	43.3	6	10.7
Chemistry	53.5	5	44.1	4	9.4
Physics	53.2	6	44	5	9.2
Economics	47.3	7	32.2	7	15.1
Music	45.8	8	31.6	8	14.2
Performing / Expressive Arts	38.2	9	23.3	14	14.9
Drama	36.8	10	23.6	13	13.2
Religious Studies	34.9	11	30.5	9	4.4
Physical Education	33.4	12	21.2	19	12.2
Computing	33.4	13	21.4	12	12.0
German	33.3	14	22.9	15	10.4
Spanish	31.8	15	25.7	10	6.1
Geography	30.1	16	24.5	12	5.6
Art and Design subjects	29.6	17	22.8	17	6.8
French	29.5	18	22.9	16	6.6
History	29.4	19	24.6	11	4.8
Statistics	28.1	20	20.5	21	7.6
Business Studies	28.0	21	18	25	10.0
Social Science subjects	27.9	22	18.8	24	9.1
Design & Technology	27.7	23	19.4	23	8.3
Engineering	26.5	24	11.4	30	15.1
Media / Film / TV Studies	24.7	25	17.3	28	7.4
Food Preparation and Nutrition	24.7	26	20.7	26	4.0
English Literature	24.7	27	17.8	20	6.9
Mathematics	24.3	28	20.4	22	3.9
English	23.5	29	17.4	27	6.1
Citizenship Studies	22.3	30	16.6	29	5.7
Science: Double Award)	10.4	31	7.5	31	2.9
All Subjects	27.6		21.9		5.7

Source: Results on grades of 16-year-olds in England published by Ofqual August 20, 2020.

2. Girls Dominate

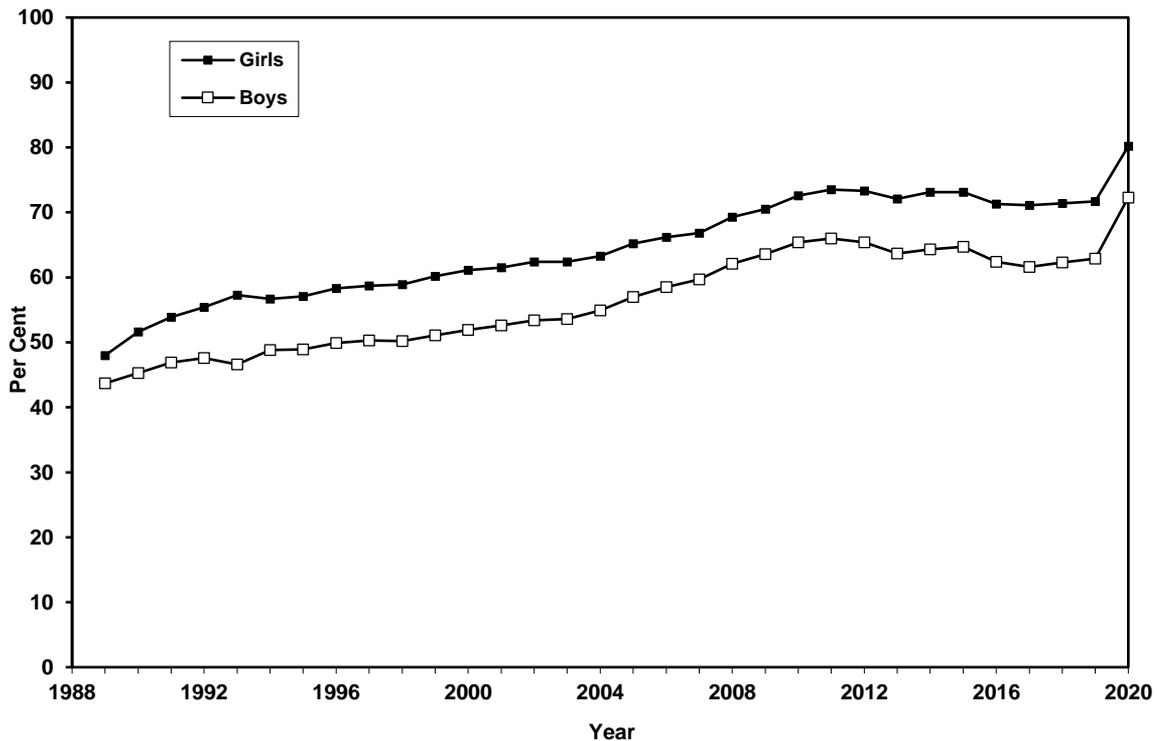
3.1. Charts 2.1 and 2.2 show the relative performance of boys and girls from 1989 –the second year of GCSEs – to the present day. In both top grades (Chart 2.1) and at the 4/C grade threshold (Chart 2.2) girls have always been ahead.

Chart 2.1: Girls and Boys GCSE Grades 7/A and Above



3.2.

Chart 2.2: Girls and Boys GCSE Grades 4/C and Above



- 3.3. Since there was little difference in the average scores in GCSE's predecessor, O-level, this was attributed to the modular structure of the new exam and the tendency of girls to work more consistently and conscientiously through the course than boys who tended to prefer working hard for exams at the end. When, however, GCSEs were reorganised as whole courses with exams at the end from 2017 to 2020, the gap narrowed only slightly in top grades and not at all at 4/C and above, so the structure of the course and the mode of assessment, however, plausible were not the explanation.
- 3.4. Chart 2.3 shows that, with the reliance on teacher assessment in 2020, girls' top grades increased by more than those of boys and the gap widened by 1.5 percentage points. This supported the impression widely held that teacher assessment favours girls. At the threshold of 4/C and above, however, boys made up some ground.

Chart 2.3: Change in Gender Gap from 2019 to 2020

Gender	Grades 7/A and Above			Grades 4/C and Above		
	2019	2020	Gain	2019	2020	Gain
Girls	24.1	30.2	6.1	71.7	80.2	8.5
Boys	17.6	22.2	4.6	62.9	72.3	9.4
Difference	6.5	8.0		8.8	7.9	

- 3.5. The overall differences are a composite of those in the individual subjects. Chart 2.4, which focuses on 16-year-olds only, so the numbers are slightly different from the other charts where it is all entries in the UK, shows the percentage of top grades varies widely with subject, and also between the sexes. Whether or not a subject was optional or compulsory was a major factor in the success rate. When everyone did the subject, as with English and maths, it tended to be low, and much higher when pupils were free to choose.
- 3.6. Girls emerged ahead by wide margins in many of the most frequently taken subjects - 32.8 percentage points in engineering, 20.6 pp in art & design, and 18.6 pp in design & technology, as well in the other subjects, including the huge gap of 13.3 pp in English. Boys were on top in only four, and by only small amounts: other sciences (3.3 pp); physics (2.5 pp); maths (0.3 pp); and statistics (0.2 pp). Such is the extent of girls' lead over boys that one wonders if they just might be cleverer.

Chart 2.4: Gender Difference in Grades 7/A and Above, 2020

JCQ Subject Categories	Girls	Boys	Difference
Engineering	54.0	21.2	32.8
Art and Design subjects	36.9	16.3	20.6
Food Preparation and Nutrition	32.5	13.3	19.2
Design & Technology	41.0	22.4	18.6
Media / Film / TV Studies	34.8	16.2	18.6
Drama	43.1	26.3	16.8
Religious Studies	42.8	26.5	16.3
Physical Education	43.6	28.2	15.4
English Literature	32.2	18.1	14.1
English	30.3	17.0	13.3
Social Science subjects	31.7	19.4	12.3
Spanish	37.1	26.0	11.1
Citizenship Studies	27.3	16.5	10.8
German	38.5	28.6	9.9
French	34.1	24.8	9.3
Computing	40.7	31.6	9.1
History	34.1	25.6	8.5
Geography	34.9	26.9	8.0
Music	49.8	42.1	7.7
Business Studies	32.5	25.0	7.5
Biology	56.8	50.8	6.0
Other Modern Languages	66.6	61.5	5.1
Performing / Expressive Arts	38.6	33.8	4.8
Science: Double Award	12.1	9.2	2.9
Chemistry	54.8	52.2	2.6
Classical subjects	76.5	73.9	2.6
Economics	48.7	46.5	2.2
Statistics	28.0	28.2	-0.2
Mathematics	24.1	24.4	-0.3
Physics	52.0	54.5	-2.5
Other Sciences	53.7	57.0	-3.3
All Subjects	31.9	23.5	8.4

Source: Source JCQ release, 10 Sept 2020, All UK Candidates Aged 16.

3. England, Wales and Northern Ireland

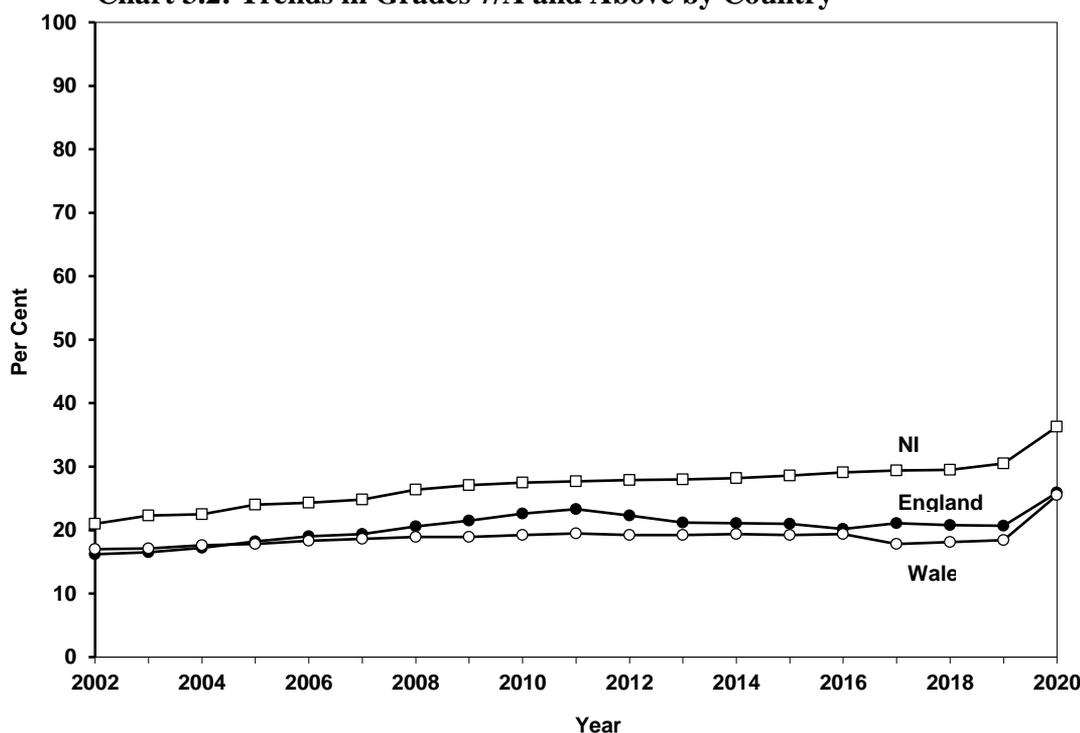
3.1. All three of the UK countries that have the GCSE as their main qualification at age 16 showed a leap in the pass rates in 2020 associated with teacher assessment. Chart 3.1 summarizes the data on the changes between 2019 and 2020. Wales which has its own education minister, own exam board and regulator seems to have been more generous than the other two, enabling it to appreciably reduce the gap from England in both top grades and at 4/C and above. Northern Ireland remains out front at both levels even though the increases it had allowed were somewhat smaller.

Chart 3.1: GCSE Results by Country, 2018

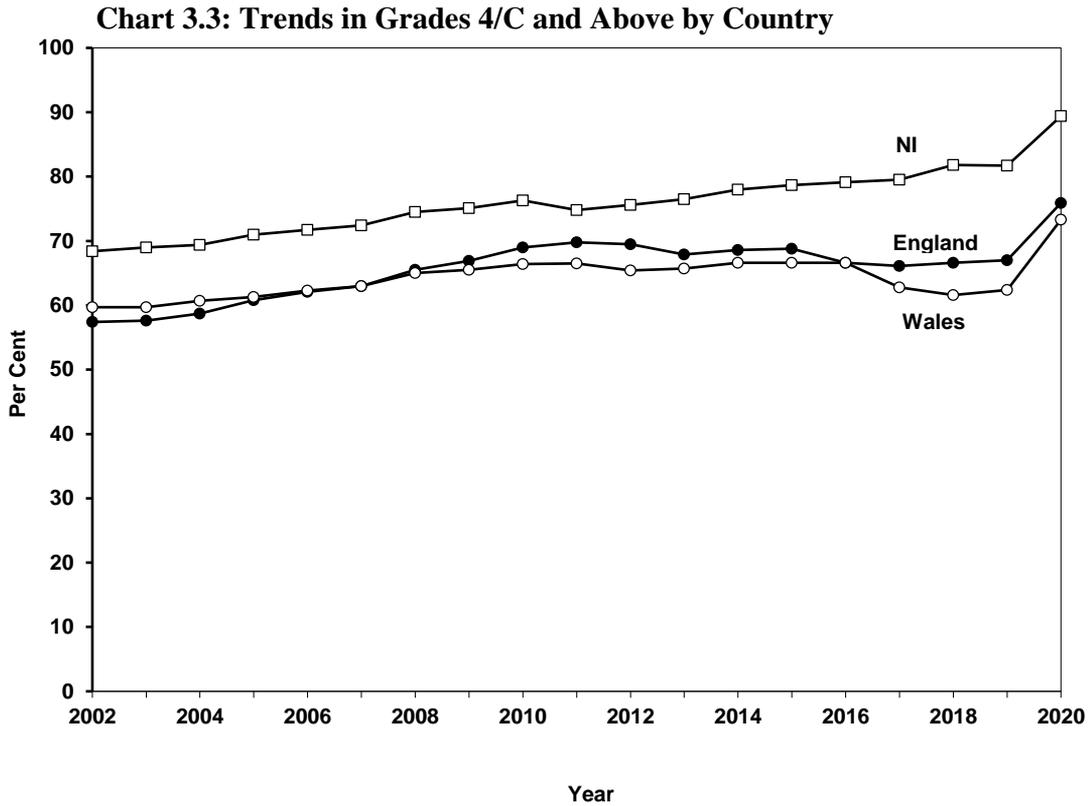
Country	At Least Grade 7/A			At Least Grade 4/c		
	2019	2020	Gain	2019	2020	Gain
Northern Ireland	31.4	37.0	5.6	81.7	89.4	7.7
England	20.6	25.9	5.3	67.0	75.9	8.9
Wales	17.9	24.9	7.0	62.4	73.3	10.9
Total	20.8	26.2	5.4	67.3	76.3	9.0

3.2. Charts 3.2 and 3.3 set the 2020 changes in the context of the past two decades. Northern Ireland has been well out in front over the whole of that period, while England and Wales have been close and have changed positions.

Chart 3.2: Trends in Grades 7/A and Above by Country



3.3. There has been less interest in the strong performance of Northern Ireland, at least on this side of the Irish Sea, than might have been expected, since it clearly leads the way. It may be that researchers shy away from the sensitive topic of grammar schools, but its education system also differs in many other ways.

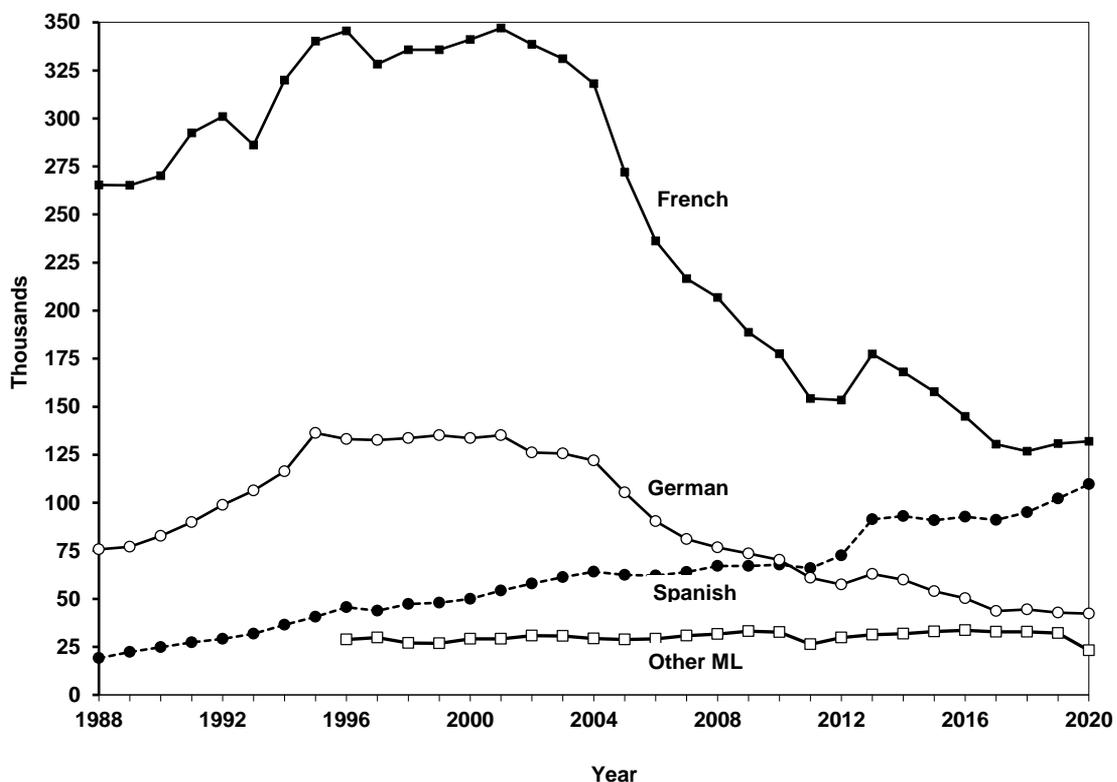


3.4. Northern Ireland tends to perform better than the other countries of the UK in international comparisons. It offers the opportunity for some very interesting comparisons on our doorstep.

4. Languages and EBacc

- 4.1. EBacc is a school accountability measure which defines the government’s view of the core curriculum. It consists of five components – English, maths, science, history or geography, and a language. The aim is for 80 per cent or more of the school population to complete it. There has been some growth, but in recent years it has stalled at about half that. English, maths and science are compulsory, and between them history and geography have nearly complete coverage. The odd one out is languages, which reduces take-up from 86 per cent for four components to the 40 per for five.
- 4.2. Chart 4.1 illustrates the problem. Since a foreign language was made optional beyond year 9 in the national curriculum, entries have fallen sharply in French and German, the two traditional mainstays, and while there has been growth in Spanish it has not compensated. Other modern languages have also made a contribution, but they have been taken mainly by native speakers and there has been a sharp fall since Brexit where they have fallen by 23 per cent.

Chart 4.1: Trends in Entries to Modern Languages¹



1. Although the figures are all taken from JCQ’s August results, there are two discontinuities: (a) in the period 1988 to 1993 the results were for England and Wales only and solely for exams devised by the examination boards which were externally marked (there was also provision for the approval of teacher-designed and teacher-marked syllabuses, of which considerable use was made but entries do not appear in the published results); (b) from 1994 to 1999, results from Northern Ireland were included, but still run lower than from 2000 onwards, the results in August 2000 showing 6,000 more entries for 1999 than appeared on the actual release in August 1999.

- 4.3. The government faces a dilemma: does it accept the apparent rejection of its core curriculum or does it drop the language component, since British people show little inclination to learn another language. It has modified its accountability measures by introducing Progress 8 and Attainment 8, which are essentially the EBacc plus three others to allow for the pursuit of a wider range of subjects, but there is still the issue of languages.

5. Prospects for 2021 and Beyond

- 5.1. It is clear from the way exam grades rose in 2020, and indeed by how much A-levels have gone up this year, that teachers in assessing pupils put more emphasis on rewarding them for all the effort they have put in, rather than on the precision and accuracy of the information the qualifications carry into future life.
- 5.2. In 2020 A-level top grades rose by 13.1 percentage points (51.2%) and at GCSE by 5.4 pp (26.0%). On top of this in 2021, A-levels increased by a further 6.3 pp (16.3%). Since the same procedures have been followed in deciding GCSE grades, these increases are a pointer to what expect in this year's GCSE, perhaps an increase in top grades of 3 pp or more. Plentiful top grades make pupils and parents happy, but they are less helpful for those using the grades for admission to the next stage of education or recruitment to employment.
- 5.3. If the pattern of GSCE results in 2020 is repeated in 2021 we would expect:
 - the percentage of top grades to increase in all subjects though by varying amounts;
 - girls to cement their lead overall and in individual subjects even more firmly;
 - Northern Ireland to continue to achieve the best results, and Wales to be the most generous in awarding grades;
 - and we already know from Ofqual's preliminary figures published in May that there is not much change in language entries, so the growth of EBacc will be stalled at a level of about 40%.
- 5.4. Looking beyond the likely changes from 2020 to 2021, it is striking how well girls do, and how well they have done since the inception of the GCSE in 1988. They are, and have been, ahead overall and in most subjects by a substantial margin. In contrast, boys managed to do better in only four subjects - all in the maths and science area – and only just.
- 5.5. This is but one aspect of female dominance in education, but the data are rarely taken at face value, but rather they are explained away. When it emerged that girls did better in the 11+ selection tests, so that more would have had to be admitted to grammar schools, it was explained away as them maturing faster. Since few continued in education after the age of 15 or 16, it was assumed that they peaked early. This was used to justify admitting boys on lower scores.
- 5.6. In the old O-level there was not much difference between the sexes, but girls leapt ahead in GCSE. This was explained as being due to the new modular structure of GCSEs, which favoured the consistent and conscientious application of girls, in contrast to boys who showed up best in final exams. When GCSEs were reformed, however, to become more like O-levels, the girls' lead was dented only slightly.
- 5.7. Now with teacher assessment girls have gone further ahead and it has been suggested that this is because teachers tend to favour them.

- 5.8. On the strength of their superior performance in schools, girls are more likely to go to university. This has not always been the case. In 1980, they were outnumbered by three to two, but forty years on there has been a complete reversal.
- 5.9. Why then does it seem so difficult to accept that females are cleverer. There are at least two possible explanations. One is the historical memory that while girls may have done well at school they tended to fade away in adult life. It was assumed that their talents plateaued at an early stage. But much likely was that it was in the script society wrote for them. This accords with my own experience. The brightest pupil in my class at school was a girl who had enviable talent. But, in spite of her very much wanting to stay on, her parents were adamant that she left at 16, “because education was wasted on a girl.” It ruined her life. She would have been totally at home in the academic world, but she was denied this and it did not end well.
- 5.10. Happily the script has changed and now girls and women are able to fully develop their talents and progress to where these talents will take them. Hence, the large numbers going to university and securing senior professional positions.
- 5.11. The other possible reason is that there are some males who do outstandingly well, beyond the past achievements of most women. In part, this is in the script, but it is also perfectly possible for women to do better, on average, but there to be more men at the pinnacle. This would be the case if their performance curves were a different shape. Scores bunched towards the middle could result in a high mean performance, while a flatter curve would allow the average to be lower, but there to be more at the top end (and also failures). These are just the shapes they have been found in intelligence tests for females and males.
- 5.12. Looking beyond 2021, the step-change in standards brought about by the need to rely on teacher assessment during the pandemic is likely to have long-term consequences. When it comes to grades, the government will find it very difficult to put grades back to where they were pre-pandemic. Parents – the voters – like plentiful top grades because they can bask in their children’s success; schools and teachers like them because it reflects well on them.
- 5.13. The future of GCSE exams may even be at risk. As much as the government is committed to them, will it stand up for them, as it has blatantly failed to do for grade standards. There are already people lobbying for exams to be scrapped. Schools and teacher unions are against them because pupils’ exam performance is used to judge the schools and teachers in league tables and inspectors’ reports. Private schools would be happy to see them go because they interrupt the smooth progression to exams at age 18, which the great majority of their pupils take. Some educationists oppose exams at 16 because, variously, they are said to distort the curriculum, be harmful to well-being and mental health, or be biased against the disadvantaged.
- 5.14. There are strong arguments for having exams at the transition from lower school to upper school or other destinations. They provide objective information based on national standards which is helpful and necessary both to the pupils themselves and those making decisions about them. Teacher assessment is a poor substitute, because it is based on the

teacher's personal experience of what pupils can achieve. Moreover, like all human beings teachers have their biases.

5.15. This could be argued at length, but the point is that the government will have a fight on its hands, and so far it has not shown it will have a taste for it.