A-LEVELS 2011

Alan Smithers

Centre for Education and Employment Research
University of Buckingham

Contents

1. **Trends** 1

2. **Gender** 4

3. **Subjects** 6

4. **Countries** 11

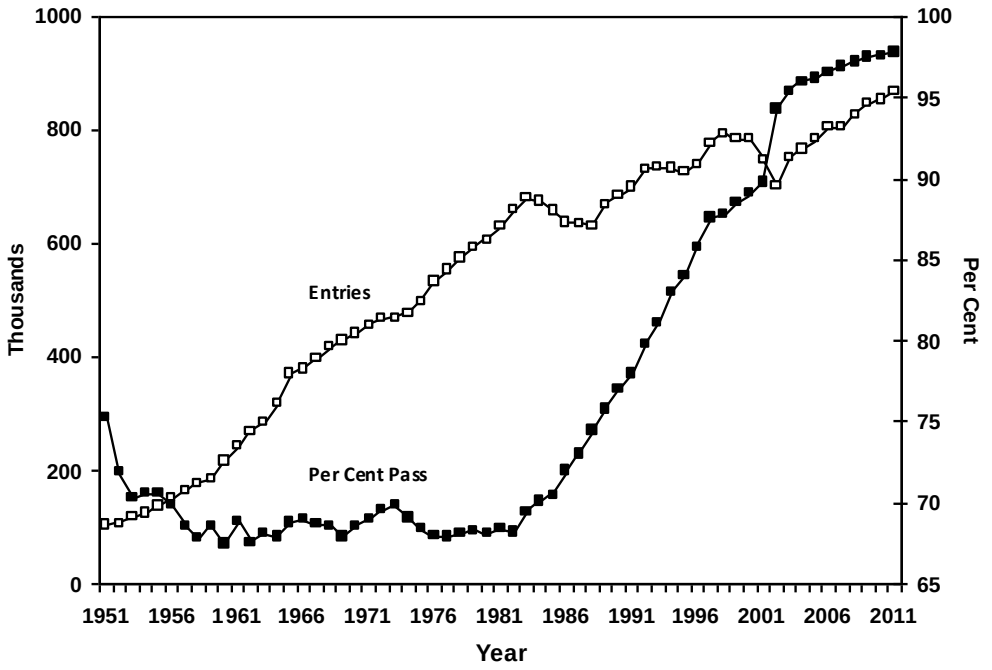
1. Trends

1.1 2011 seems to be the year that the examiners have finally decided that enough is enough when it comes to grade inflation. Instead of the seemingly inexorable rise in the grades awarded there is little overall change from last year. Even so the percentage awarded the new A* is the percentage of A grades that were awarded when it was introduced. Boys have reduced the gender gap and do equally well at the highest level. The A* seems to be giving them the chance to show what they can do - especially as maths and the sciences are among the subjects earning most top grades. Entries are up again, with increases in the sciences, but continuing falls in Geography, French and German. There are also falls in the performing arts, PE and law suggesting some swing back to traditional subjects. Results in Northern Ireland, though still well ahead of England and Wales, have fallen back this year for both boys and girls perhaps not unconnected with changes to their school system.

Entries and Passes

1.2 In the sixty years of existence A-levels have enjoyed almost unbroken growth and improved results. They were introduced in 1951 as single subject examinations to overcome the limitations of the Higher School Certificate which was a diploma-type examination. They derive directly from university entrance examinations and universities gradually gave up their examinations to rely on the national examination. However, as the explosion in A grades made it more difficult to tell applicants apart they have been reintroducing their own tests and assessments.

Chart 1.1: A-Level Entries and Passes



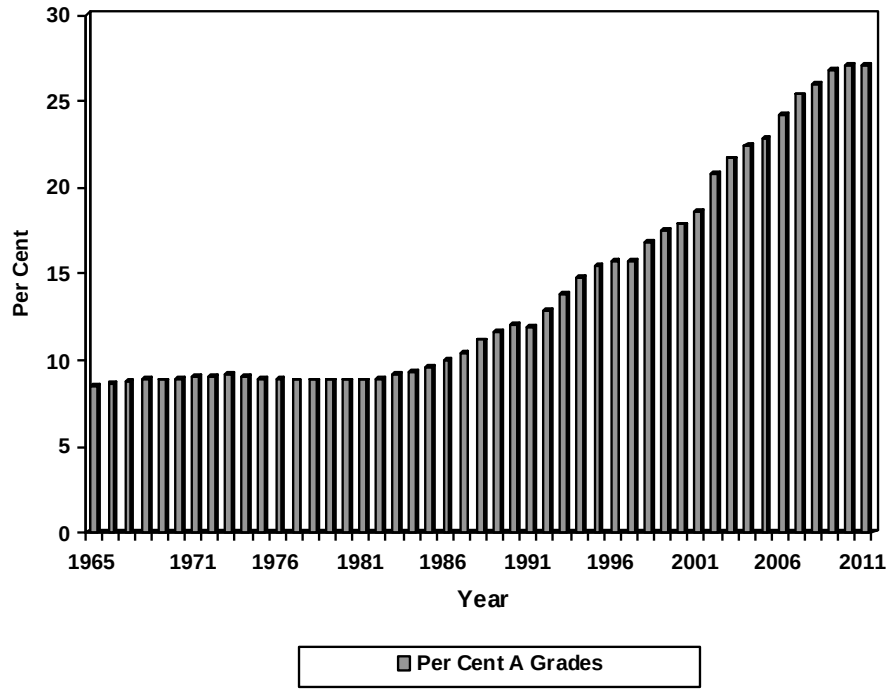
1.3 Chart 1.1 shows that examination entries have increased more than eightfold since 1951, rising from 103,803 in the first year to 867,317 in 2011. For the first thirty years the past rate was set at 70 per cent, but since 1982, when the examination became standards-based, the pass rate has risen every year. In the past 29 years the pass rate has gone up from 68.2 per cent in 1982 to 97.8 in 2011.

1.4 In the early years A-levels served as the narrow gateway to 24 universities. Now there are 124 and rising. The pupils who took them were mainly at grammar and independent schools. They were those who had shown real promise at O-level so that a built-in failure rate of 30 per cent posed a tough hurdle. The examinations were at first pass or fail. Distinctions were awarded for exceptional performance, but passing was the usual requirement. They supplemented the universities' own entrance examinations. There were no mandatory grants, but scholarships were awarded on the basis of special papers which not all candidates took. There was no centralised admissions system, applications being made to the individual universities.

'A' Grade

1.5 Pass/fail was replaced by a five-point scale, A-E, in 1965 so it effectively became five levels of pass. The maximum of A grades to be awarded was initially set at 10 per cent. But again with norm-referencing superseded by criterion referencing the pass rate at this level took off, improving year by year from 8.9 per cent in 1982 to 27.0 per cent in 2010 at which level it has been held in 2011.

Chart 1.2: A Grades at A-level



1.6 As competition for places at the leading universities hotted up, conditional places were increasingly offered on the basis of specified grades being achieved. Since 1982 A grades awarded have almost trebled and it has become difficult for the leading universities to tell applications apart and take the decisions they have to take, especially as they have to make offers on predicted rather than actual grades.

Starred A

1.7 The need for something above an A grade has led to the introduction of the A*. An advanced extension award was tried (essentially a re-run of the old scholarship papers) but this was not taken into account by the universities and few pupils

entered. The A*, however, has burgeoned and standing at 8.2 per cent in 2011 is where the A grade was when it first came in. The A* is now the new 'A', and the old 'A', even though its standard may have been maintained, may not be enough to get into the chosen course. It is only the second year of A*, but the outlook is promising. Boys and girls perform equally overall and the top award ranges from 27.5 per cent in further maths to 1.6 per cent in media/film/ TV.

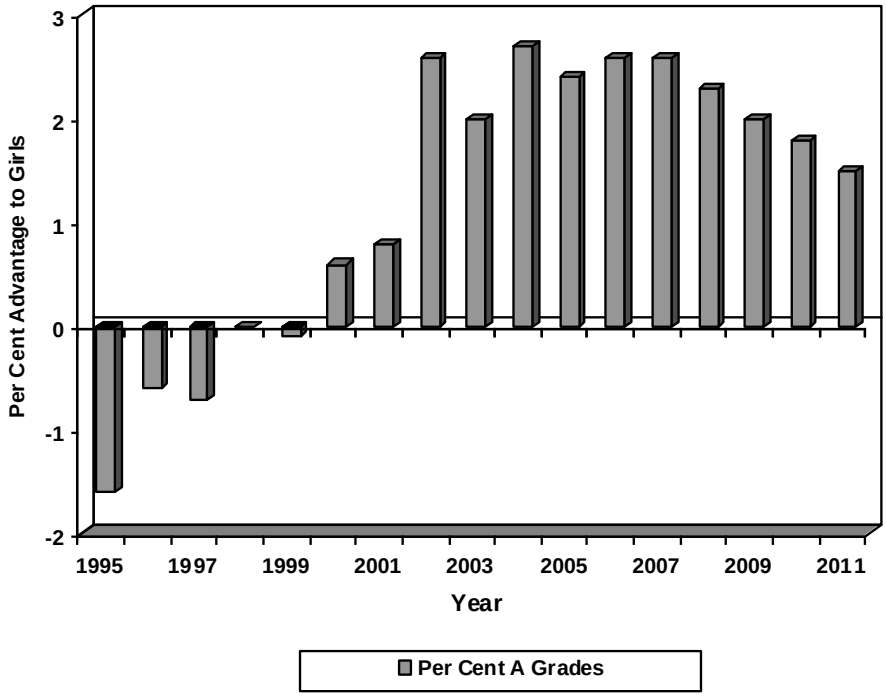
2. Gender

2.1. This year's results are also notable for the narrowing of the gender gap at the highest level. This is the consequence, in part, of a recurring pattern in the distribution of the scores of males and females which occurs in a wide variety of psychological and educational tests. Boys scores tend to be more spread out with more top performers and poor performers and the girls tend to be more bunched around the mean (which may be higher than that for boys). Alice Heim, a Cambridge psychologist, drew down the opprobrium of her sex on herself by describing this phenomenon, tongue in cheek, as 'the mediocrity of women'. The introduction of A* is evidently picking up some of this wider spread in the performance of boys.

Difference at A Grade

2.2. Girls have progressively moved ahead of boys in A grades awarded. Up to the turn of the century, as Chart 2.1 shows, boys achieved more A-grades than girls. But from 2000 onwards girls have opened up a gap. Their lead over boys increased to 2.6 percentage points in 2002, the first year the new six-module A-level structure came on stream. That difference was maintained for eight years, but has now fallen back to 1.5 percentage points.

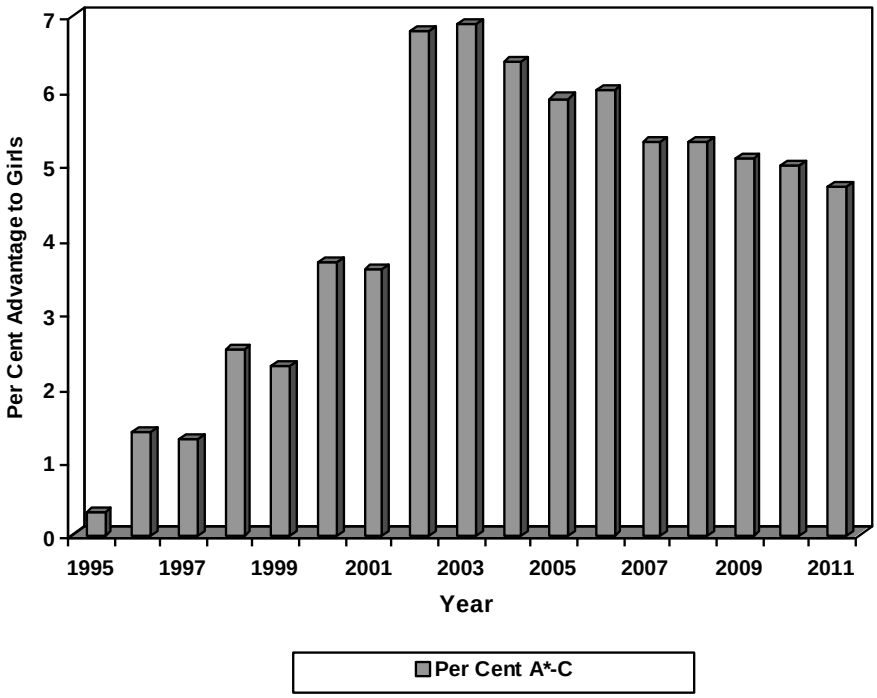
Chart 2.1: Per Cent Advantage to Girls at A Grade



Difference at A*-C

2.3. It is suggested that the modular A-level structure played to the strengths of girls who, on average, tend to apply themselves more diligently and consistently than do boys. This is borne out by the huge difference at A-C grade shown in Chart 2.2 with girls going almost seven percentage points ahead with the new modular structure. But hard work can only take you so far and if the A* genuinely identifies top talent then a different pattern is to be expected.

Chart 2.2: Per Cent Advantage to girls A*-C Grades



Difference at A*

2.4. Boys typically do better in end-of-course examinations. The six-module structure has now been replaced by one of four modules, so that the courses are examined in larger chunks. That may have contributed to the narrowing of the gender gap, and the A* gives high performing boys more of an opportunity to show what they can do.

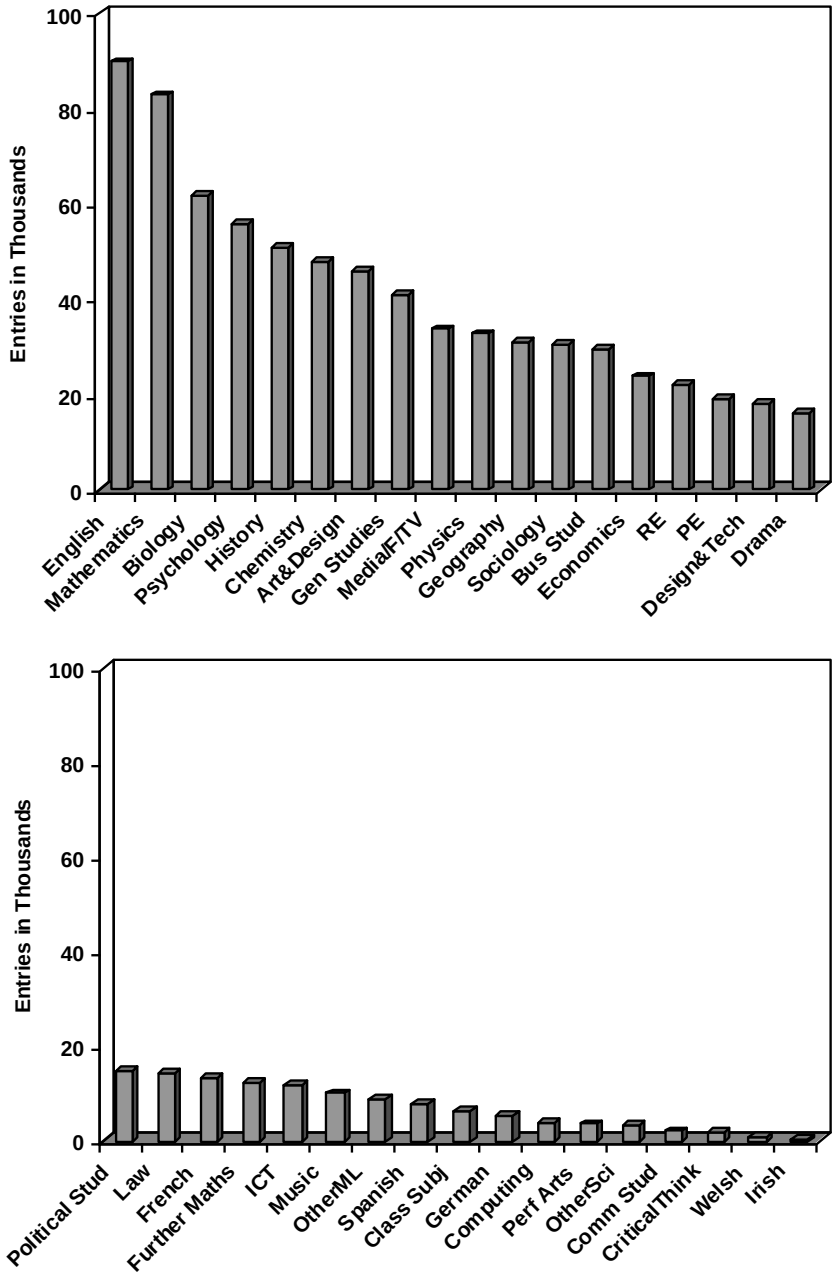
3 Subjects

3.1. A-levels are separate subject examinations. They differ considerably in their popularity and the percentages of A-grades awarded. They also differ in what you can do with them since they are a platform for university studies, so physics and maths open doors to the physics and engineering, and English to English and French to French. UCAS points send out the uphelpful message that all A-levels are the same whereas, in fact, they are valued differently by the universities. Rather than attempting to tweak the UCAS points system it should be scrapped.

Entries

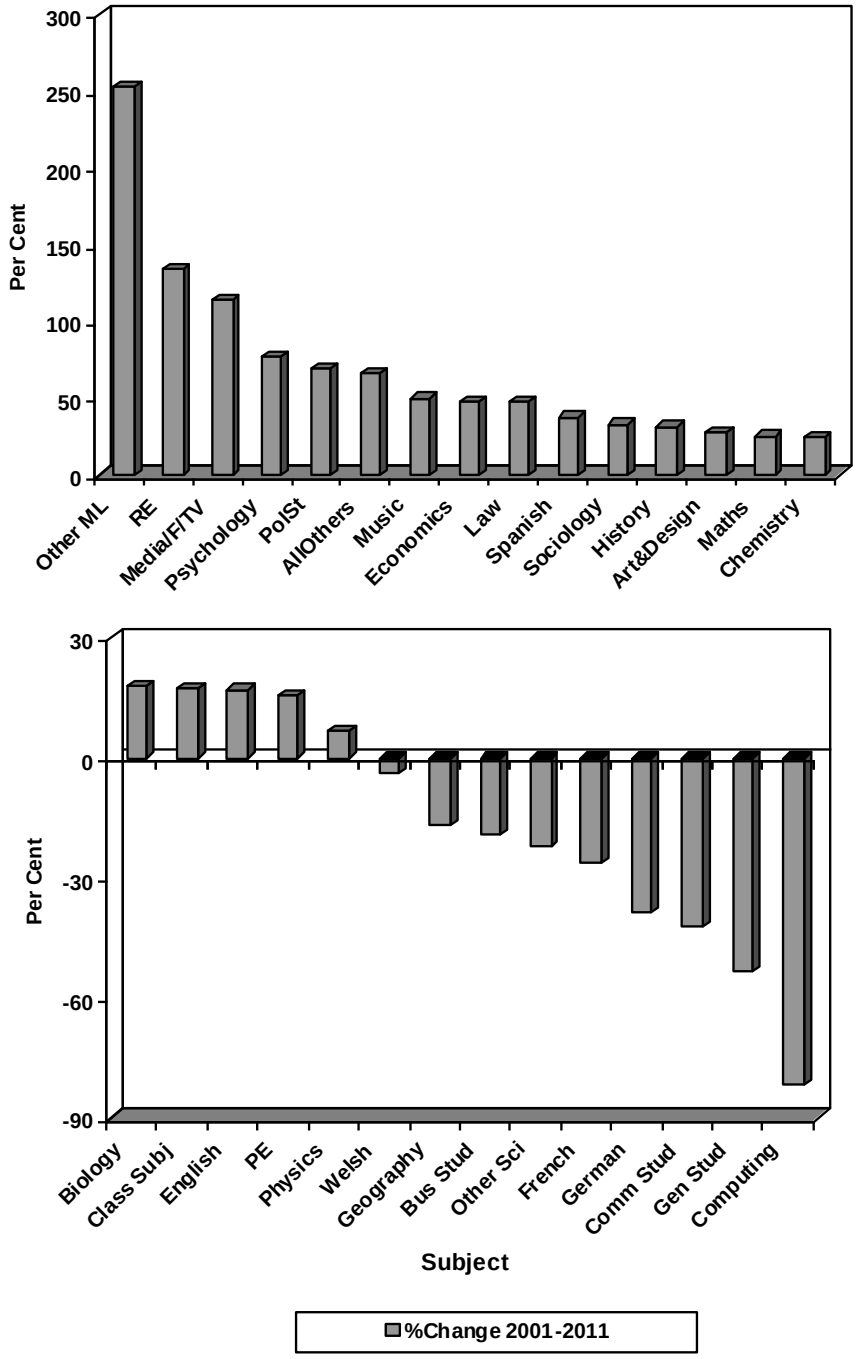
3.2. Chart 3.1 shows the number of entries in each subject in 2011. They range from 89,990 in English to 917 in Welsh and 328 in Irish.

Chart 3.1: Subject Entries 2011



3.3. There has been considerable change in the pattern of entries in the decade since 2001, with subjects like religious studies, media studies, psychology and political studies going up sharply. In contrast, there have been falls in general studies, communication studies, German, French, business studies and geography.

Chart 3.2: Change in subject Entries 2001-2011

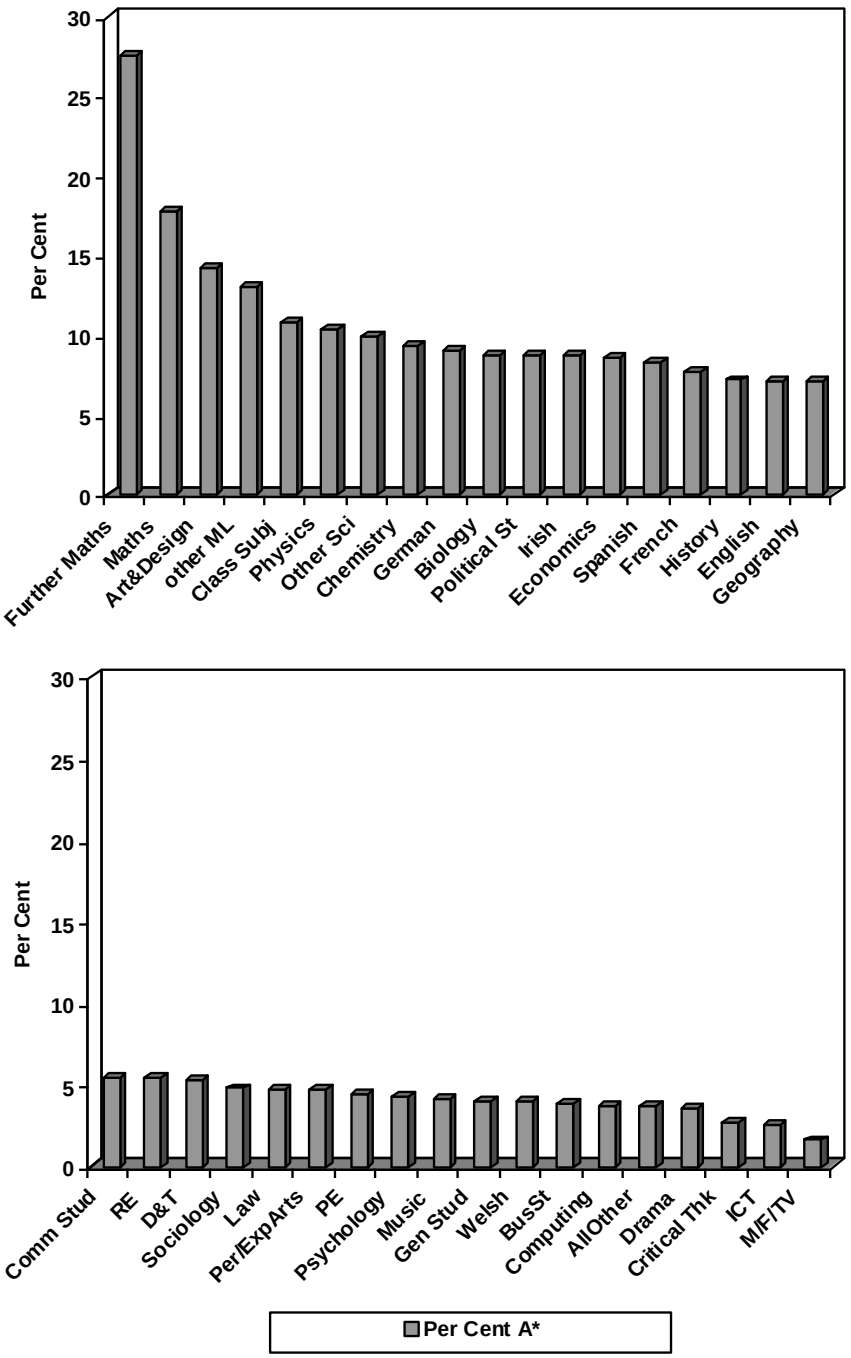


Starred A by Subject

3.4. Chart 3.3 shows that the starred A is gained mainly in the sciences and modern languages, subjects where it is relatively easy to tell correct answers, and examiners can be sure that a score worthy of 90 per cent plus has been achieved. There is also

a strong element of self-selection into the subjects so they will have been chosen by young people confident that they could do them.

Chart 3.3: A* by Subject 2011



3.5. In the humanities where quality is more a matter of judgement fewer A* are awarded. The lowest percentages are gained in some of the newer subjects leading to the suspicion that they are frequently taken by the less able.

Changes in Take-Up and A Grades Awarded

3.6. The government through the introduction of the EBacc and the comments of David Willetts, the higher education minister, is hoping to encourage students to think

more seriously about the traditional subjects. The first results for the EBacc, a combination of GCSEs, were compiled in 2010 and will have had no bearing on the A-level choices of this year's A-level candidates. But it is interesting to see how the pattern of uptake and A-grades has changed in the past ten years, and the past year, to see where the swings have been.

Chart 3.4: Change in A-Level Entries and A Grades 2001-2011

Subject	Entries			A*/A		
	2001	2011	%Change	2001	2011	%Change
English	76,808	89,980	17.1	16.5	22.3	35.2
Maths	66,247	82,995	25.3	29.3	44.7	52.6
History	38,693	50,897	31.5	18.6	27.4	47.3
Geography	37,505	31,226	-16.7	19.1	30.1	57.6
Biology	52,647	62,041	17.8	18.8	28.3	50.5
Chemistry	38,602	48,082	24.6	26.7	34.3	28.5
Physics	30,701	32,860	7.0	24.9	33.0	32.5
French	17,939	13,196	-26.4	24.7	40.1	62.3
German	8,446	5,166	-38.8	28.8	42.0	45.8
Spanish	5,530	7,610	37.6	28.3	37.8	33.6

3.7. Chart 3.4 shows the changes over the period 2001 to 2011 for selected subjects. There have been substantial falls in geography, French and German. Physics has remained much where it was. In all subjects the percentage of A grades awarded went up markedly.

Chart 3.5: Change in A-Level entries and A Grades 2010-2011

Subject	Entries			A*/A		
	2010	2011	%Change	2010	2011	%Change
English	89,320	89,980	0.7	23.1	22.3	-3.5
Maths	77,001	82,995	7.8	44.8	44.7	-0.2
Further Maths	11,682	12,287	5.2	58.8	57.7	-1.9
History	49,222	50,897	3.4	27.7	27.4	-1.1
Geography	32,063	31,226	-2.6	30.2	30.1	-0.3
Biology	57,854	62,041	7.2	28.5	28.3	-0.7
Chemistry	44,051	48,082	9.2	34.6	34.3	-0.9
Physics	30,976	32,860	6.1	32.9	33.0	0.3
French	13,850	13,196	-4.7	39.1	40.1	2.6
German	5,548	5,166	-6.9	40.8	42.0	2.9
Spanish	7,628	7,610	-0.2	38.4	37.8	-1.6
Media/Film/TV	33,375	33,855	1.4	12.5	11.8	-5.6
Sport/PE	20,612	19,344	-6.2	15.7	15.2	-3.2
Performing Arts	3,708	3,575	-3.6	17.9	16.8	-6.1

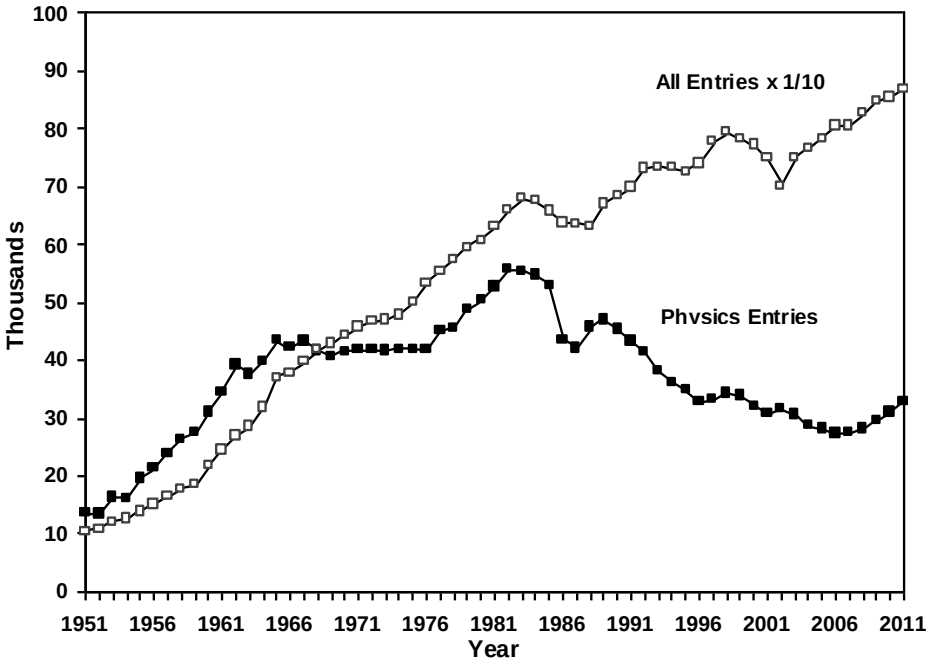
3.8. The changes in the last year are shown in Chart 3.5. Entries in geography, French and German have continued to fall, but there have also been some declines in newer subjects such as performing arts and sport/PE though media studies has continued to

grow. In some subjects A grades went up and in others fell, resulting in the same overall figure. There are signs of revival in the physical sciences, but it is also necessary to take the long view.

The Long View

3.9. Physics entries have been rising in recent years, perhaps as a result of the separate sciences being promoted at GCSE when twenty years ago they were almost swept away in the rush into combined science. It is also being mooted that the popularity of some science-based television programmes is influencing choices.

Chart 3.6: A-Level Physics Entries from the Beginning



3.10. In Chart 3.6 we take the long view and as welcome as the recovery of physics may be, we can see that it has a long way to go to regain the ground lost in the past 30 years. Although entries have risen by seven per cent since 2001, the 32,860 this year has to be set against the 55,728 in 1982.

4.Countries

4.1. The A-level results published in August are UK-wide results covering England, Wales and Northern Ireland. Although some Scottish students take UK A-level, in the main pupils in Scotland take Highers and Advanced Highers.

Chart 4.1: Per Cent A*/A Grades

Countries	2001			2010		
	Boys	Girls	Total	Boys	Girls	Total
Northern Ireland	22.8	25.9	24.6	31.5	36.9	34.5
Wales	18.2	21.2	21.5	22.7	24.8	23.9
England	18.0	18.6	18.3	26.2	27.4	26.8

4.2. Chart 4.1 shows that the average levels of performance are very different in the different parts of the UK. Pupils in Northern Ireland have consistently done much better than those in England and Wales. This may not be unconnected with the grammar school system which has operated there, but such is the political sensitivity to selection in education that it is rarely discussed in these terms. 'A' grades for both boys and girls in Northern Ireland have fallen this year and again this may be associated with changes in the educational system.

4.3. Wales seems to have fallen back with respect to England in the past decade. In 2001 it was three percentage points ahead, but it is now nearly three percentage points below. It is has suggested that the absence of nationally reported school tests in Wales means that its pupils have become less well practiced in the art of test taking. While the gender gap has narrowed this year in the higher grades in England, it has widened in Wales.