## A brief explanation of summer 2013 GCSE results

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This briefing is based on data published by JCQ on Thursday 22nd August 2013 and available at www.jcq.org.uk/examination-results/gcses .

## Key points

- In English and mathematics, proportions of Year 11 students achieving A*-C grades show small increases.
- Entries from 16 year-olds are very stable and the small drop at $A^{*}-C$ overall is largely due to the more challenging science subjects.
- The gap between the achievement of 15 and 16 year-olds has widened this year.
- There are more entries this year from 15 year-old students so we cannot easily compare 2013 results with 2012.


## Summary

This summer the number of entries for all subjects is up 4.2 per cent from 5.2 million in 2012 to 5.4 million in 2013. This is due to an increase of nearly 40 per cent in the entry from 15 year-olds and a smaller increase in entries for English and mathematics from post-16 students. Entries from 16 year-olds are very stable - down less than 1 per cent at just over 4.4 million.

For all students across the UK, the proportions getting the grades are as follows:

- the proportion getting $\mathrm{A}^{*}$ is down 0.5 percentage points to 6.8 per cent;
- the proportion getting $A^{*}$ and $A$ is down 1.1 percentage points to 21.3 per cent;
- the proportion getting $A^{*}-C$ is down 1.3 percentage points to 68.1 per cent;
- the proportion passing $\left(A^{*}-G\right)$ is down 0.2 percentage points to 98.8 per cent.

These changes reflect changes in the makeup of the overall cohort. This summer, there are more entries from 15 year-olds, and more students are taking IGCSE ${ }^{1}$. Entries from 15 year-olds are up 39 per cent from 579,831 to 806,141 , and this summer they make up 15 per cent of the overall entry. Entries from post- 16 students are up from 207,984 to 226,996, with most of these additional entries in English and mathematics.

These changes in entry patterns make it difficult to fairly compare the overall results in 2013 with results in 2012 - we are not comparing like with like.

## Performance by year group

The 16 year-old entry is very stable and so we can compare summer 201316 yearolds with summer 201216 year-olds. The table below compares the cumulative percentages of students at $A^{*}$, $A$ and $C$ for all students, 15 year-olds, 16 year-olds and post-16 students, for all subjects.

|  | Cumulative percentage at grade <br> (summer 2012 figures in brackets) |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Grade | All students | 15 year-olds | 16 year-olds | Post-16 |
| $\mathbf{A}^{\star}$ | $6.8(7.3)$ | $4.3(4.9)$ | $7.4(7.8)$ | $3.7(4.6)$ |
| A | $21.3(22.4)$ | $14.2(15.1)$ | $23.1(23.8)$ | $10.9(12.8)$ |
| C | $68.1(69.4)$ | $58.1(59.0)$ | $70.9(71.6)$ | $50.4(52.5)$ |

In general, 15 year-olds and post-16 students perform less well than 16 year-olds. The table above shows that the gap between the cumulative percentage of students at $A^{*}, A$ and $C$ for 15 year-olds and 16 year-olds has widened since 2012. The gap is now 3.1 per cent at $A^{*}, 8.9$ per cent at $A$ and 12.8 per cent at $C$. So in summer 2013 more of the overall entry comes from 15 year-olds, and those students are doing less well than in previous years.

The following table shows the proportion of students achieving $A^{*} / A$ and $A^{*}-C$ in English, mathematics and the science subjects, by age group.

[^0]|  |  | Grades A*/A |  |  |  | Grades A*-C |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  | Age 15 | Age 16 | Post-16 | Age 15 | Age 16 | Post-16 |  |  |
| Additional science | 20.7 | 11.3 | 13.2 | 72.1 | 63.8 | 59.4 |  |  |
|  | $(10.5)$ | $(13.4)$ | $(12.8)$ | $(53.9)$ | $(66.8)$ | $(61.7)$ |  |  |
| Biology | 25.5 | 42.7 | 17.8 | 80.0 | 91.7 | 62.5 |  |  |
|  | $(29.4)$ | $(47.6)$ | $(23.5)$ | $(83.0)$ | $(93.9)$ | $(64.5)$ |  |  |
| Chemistry | 29.8 | 43.2 | 32.9 | 81.2 | 90.8 | 74.5 |  |  |
|  | $(39.7)$ | $(48.6)$ | $(40.3)$ | $(87.5)$ | $(93.4)$ | $(80.0)$ |  |  |
| English | $8.9(9.8)$ | 16.1 | $3.7(5.0)$ | 52.3 | 67.6 | 41.4 |  |  |
|  |  | $(16.3)$ |  | $(53.9)$ | $(67.0)$ | $(40.9)$ |  |  |
| Mathematics | 10.6 | 17.0 | $4.5(4.5)$ | 51.7 | 62.1 | 41.1 |  |  |
|  | $(12.0)$ | $(17.7)$ |  | $(52.0)$ | $(62.0)$ | $(43.1)$ |  |  |
| Physics | 31.8 | 42.0 | 31.3 | 83.7 | 91.4 | 75.3 |  |  |
|  | $(34.9)$ | $(46.7)$ | $(38.8)$ | $(82.9)$ | $(93.7)$ | $(78.7)$ |  |  |
| Science | $9.4(8.9)$ | 4.9 | $6.0(7.5)$ | 55.1 | 47.9 | 52.8 |  |  |
|  |  | $(10.5)$ |  | $(55.3)$ | $(64.7)$ | $(56.1)$ |  |  |
| All subjects | 14.2 | 23.1 | 10.9 | 58.1 | 70.9 | 50.4 |  |  |
|  | $(15.1)$ | $(23.8)$ | $(12.8)$ | $(59.0)$ | $(71.6)$ | $(52.5)$ |  |  |

## English/English language

## (combined under the heading 'English' in the JCQ data)

A*-C outcomes for 16 year-olds actually rose from 67.0 per cent to 67.6 per cent in 2013. The proportion of all students achieving $A^{*}-C$ is down 0.5 percentage points from 64.1 per cent to 63.6 per cent. This drop is due to 15 year-olds and post-16 students performing less well than in previous years.

## Mathematics

The proportion of 16 year-olds achieving $A^{*}-C$ is very stable -62.1 per cent compared to 62.0 per cent in 2012. The proportion of all students getting $A^{*}-C$ has dropped by 0.8 percentage points to 57.6 per cent this year. Entries have increased by nearly 85,000 but the overall entry is now much more in line with entries in 2011.

Entries from 15 year-olds rose by 49 per cent to 170,357 (23 per cent of the entry for mathematics). The gap between the achievement of 15 and 16 year-olds has widened - 15 year-olds at A*-C were 10 percentage points lower than 16 year-olds in 2012, and 10.4 percentage points lower this summer. The fact that there are more 15 year-olds this year has brought the overall figures down.

## The science subjects

Results in science, additional science and the separate sciences cannot easily be compared with 2012, for a number of reasons.

First, the assessments are designed to be more challenging - we have made it clear that students this summer (and in 2012 for new Science) would have to perform at a higher level than in previous years to get the same grades. Before the exams were taken, the exam boards carried out some modelling work that suggested we might see decreases of about 2 per cent in the proportion achieving $A^{*}-C$ in Science and additional science, and similar decreases in the proportion achieving $A^{*} / A$ in the separate sciences. This modelling was used to provide statistical guidance for awarders setting grade boundaries. But because awarders were setting new standards they were also required to make sure the grades reflected the quality of work expected.

Second, entries are far from stable. In Science, the 2013 entry for 16 year-olds $(125,733)$ is less than half that of $2012(314,230)$. The entry for all students is also lower in 2013 ( 451,433 in 2013, down from 552,504 in 2012). And the 2012 entry included students who sat the previous Science qualification. So it is difficult to make meaningful comparisons about the proportions of students at each grade.

Additional science is the most stable qualification in terms of entries overall, and for 16 year-olds specifically. The proportion of students achieving $A^{*}-C$ is down 3 percentage points to 63.8 per cent.

Entries for the separate sciences are stable for 16 year-olds but the entry from 15 year-olds has doubled for physics and nearly trebled for biology and chemistry. In all three separate sciences, 15 year-olds perform less well than 16 year-olds, but the size of the gap varies, and has decreased since 2012 for physics but increased for chemistry. This may reflect different ways of using these new qualifications in schools.

In separate sciences the proportion of students achieving the top grades - $A^{*}$ and $A$ - has dropped for all students, and also for 16 year-olds. Some of this drop may be because higher ability students have moved to IGCSEs (where entries have doubled) but it will also be due to the more challenging assessments in these new qualifications.

## An EBacc ${ }^{2}$ effect?

Entries are up overall but entries in certain subjects are also up for the 16 year-old cohort. Some of these increases may be due to more students in England choosing EBacc subjects. For example, entries in modern foreign languages have increased

[^1]by 19 per cent in French, 12 per cent in German and 29 per cent in Spanish for the 16 year-old cohort. However, overall entries in modern foreign languages for all age groups have increased by 16 per cent in French, 9 per cent in German and 26 per cent in Spanish. And the entries for geography and history have increased by 19 per cent and 16 per cent respectively in both cases.

## Note

In this document we have referred to the age of students entered for GCSEs. These are defined as follows:

- fifteen year-olds - students in school Year 10 (or earlier) in the academic year 2012/13;
- $\quad$ sixteen year-olds - students in school Year 11 in the academic year 2012/13;
- post-16 - students who are beyond Key Stage 4. This will include students in school Years 12 and 13 as well as adult students of all ages.


[^0]:    ${ }^{1}$ For more detail, see www.ofqual.gov.uk/files/2013-08-01-summer-2013-why-gcses-may-look-different-this-year.pdf

[^1]:    ${ }^{2}$ The EBacc is a performance measure for schools. For more information see www.education.gov.uk/schools/teachingandlearning/qualifications/englishbac/a0075975/the-englishbaccalaureate

