



## Key points

- Some variation in year-on-year results for individual schools and colleges is normal.
- The level of variation this year is similar to previous years.

We have previously published an analysis of the year-on-year variation in the percentage of students achieving A\* to C in a number of GCSE subjects. We know that individual schools and colleges will always see variation in the proportion of students achieving particular grades from one year to the next. This can be due to many different factors, including differences in the ability mix of the students, different teaching approaches, changes in teaching staff or teaching time, and changes to qualifications.

Now that GCSE results for summer 2016 have been published, we have looked at the year-on-year variation in the same subjects in summer 2016. They are presented here, as well as the graphs we have previously published. This year we have also looked at the year-on-year variation in English/English language across GCSE and Level 1/ Level 2 certificates as there has been a large migration of students from GCSE to these GCSE alternatives in this subject in recent years. For completeness we have also included graphs showing the year-on-year variation in mathematics across GCSE and Level 1/ Level 2 certificates although the majority of students enter a GCSE qualification in this subject.

For English/English language, English literature and mathematics, we have looked only at schools and colleges with 50 or more students in both years. For all other subjects, we have looked only at schools and colleges with 25 or more students in both years. We have also looked at the variation in English/English language, English literature and mathematics for students in Year 11 only (16-year-old students).<sup>1</sup>

We have plotted the variation seen in each of several hundred schools and colleges. Each bar represents the number of schools and colleges with a particular level of variation, measured in intervals of 2.5 percentage points. For example, the bar to the left of zero represents schools that had a drop of up to 2.5 percentage points and the bar to the right of zero represents schools that had

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<sup>1</sup> Note that the number of schools/colleges is slightly lower in the Year 11 only graphs, because we have only included schools and colleges with 50 or more Year 11 students

an increase of up to 2.5 percentage points. The higher the peaks in the middle, the greater the stability from one year to the next.<sup>2</sup> The mean on each graph is the average of the year-on-year difference for each school. The standard deviation (Std. Dev. or SD on the graphs) is a measure of the spread of the variation – a lower standard deviation means there is less variation overall whereas a higher standard deviation means there is more variation.

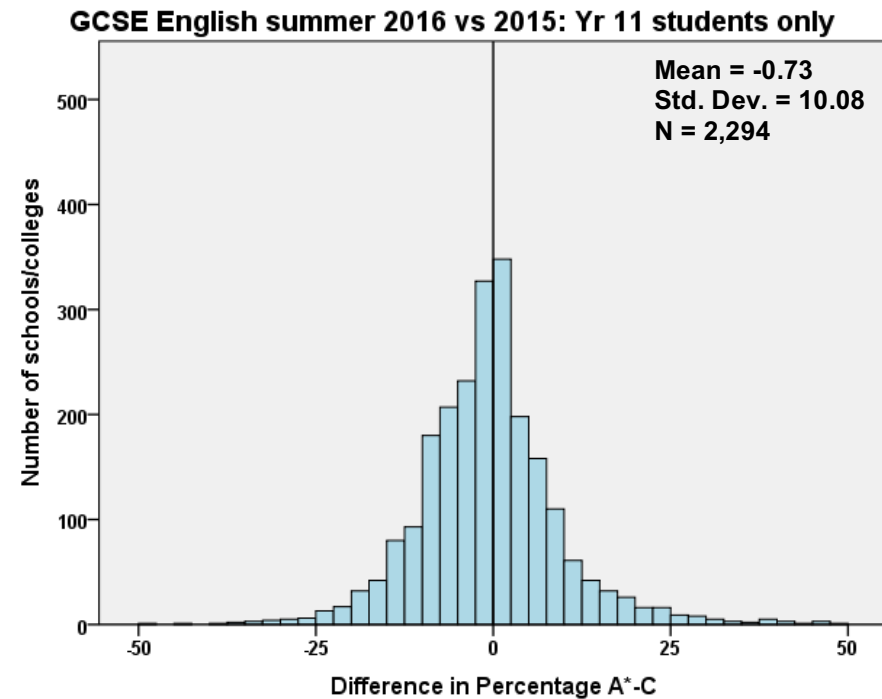
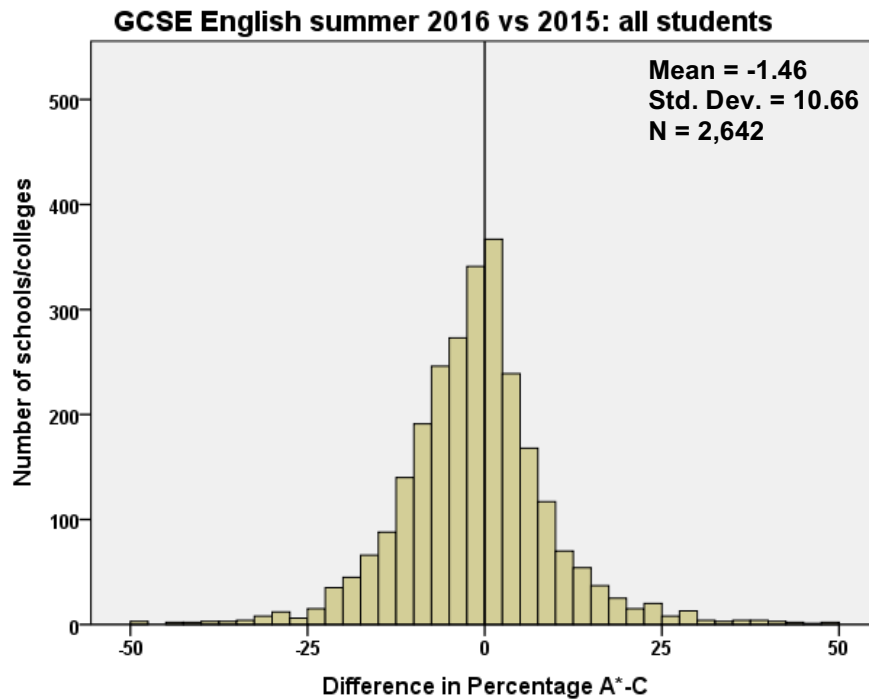
In these graphs the schools tend to be clustered around the middle, which means that most schools see very little year-on-year variation. At the edges of the graphs schools are seeing much greater variation (both increases and decreases in the proportion of students achieving A\*-C).

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<sup>2</sup> Note that, although the same scales are used for the y axis on each of the graphs within a subject, the scales do vary between subjects  
Ofqual 2016

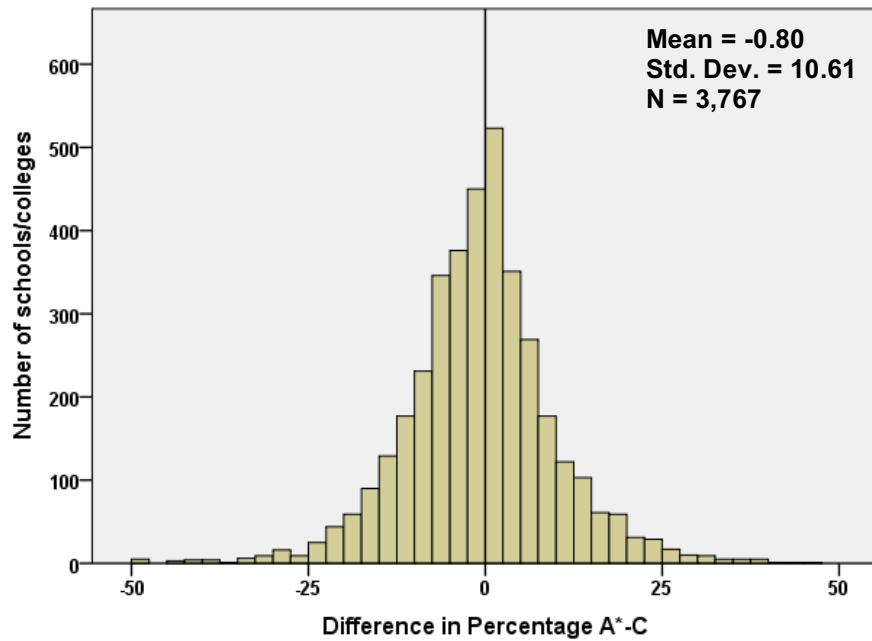
## English/English language

There is less variation in English/English language results this year than there has been in previous years. This is likely to be due to the number of entries in this subject remaining relatively stable between 2015 and 2016 whereas in previous years entries had dropped due to the migration of students to Level 1/ Level 2 certificates. There is less variation when we look only at 16-year-old students (those in Year 11 – shown in blue).

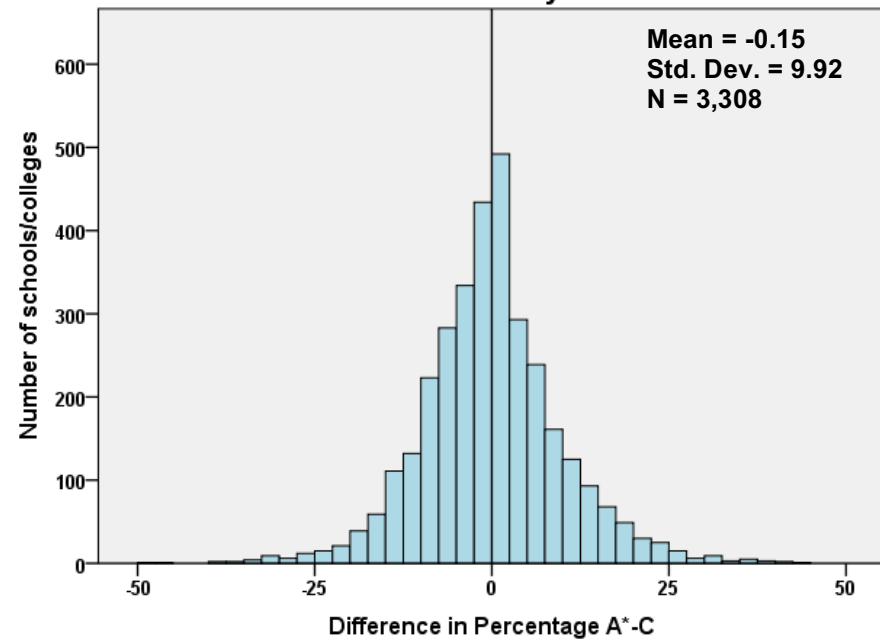


We know that schools and colleges have changed their approach to English/English language GCSE entries in recent years and the graphs below show the variation for students taking GCSE or Level 1/ Level 2 Certificates (also known as International GCSEs) in this subject. These graphs show less variation than those above and this would be expected as a lot more centres are included.

**GCSE and Level 1/2 Certificates English summer 2016 vs 2015: all students**

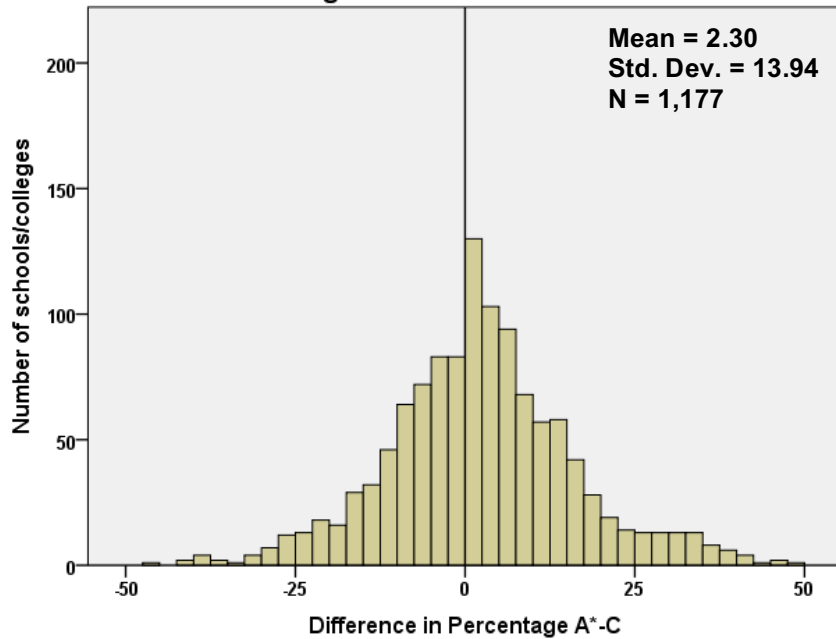


**GCSE and Level 1/2 Certificates English summer 2016 vs 2015: Yr 11 students only**

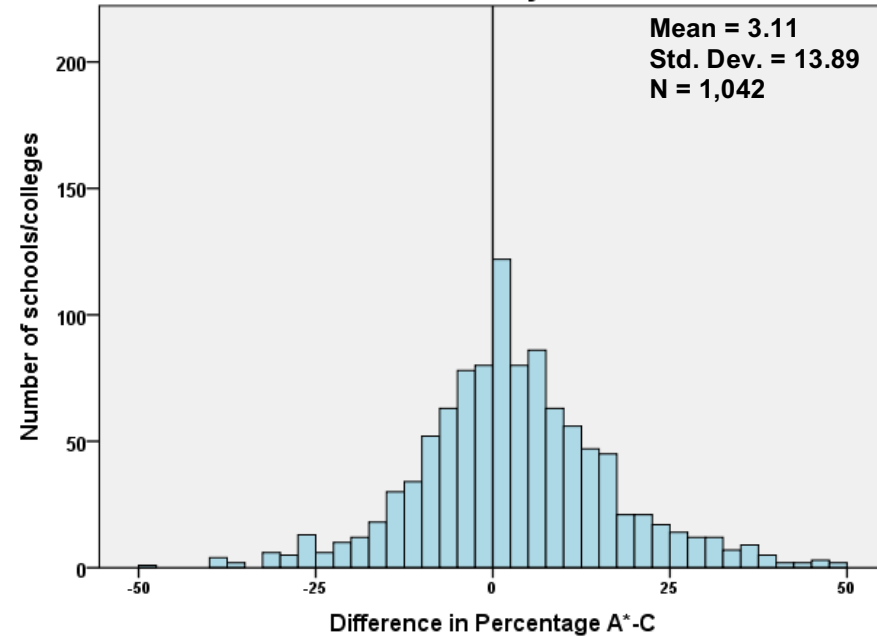


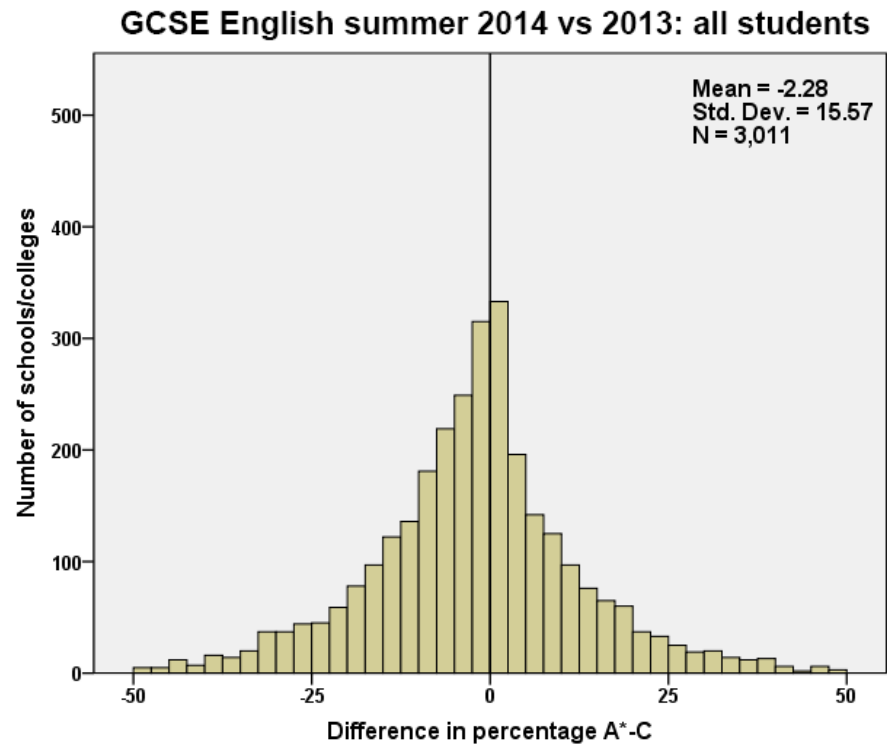
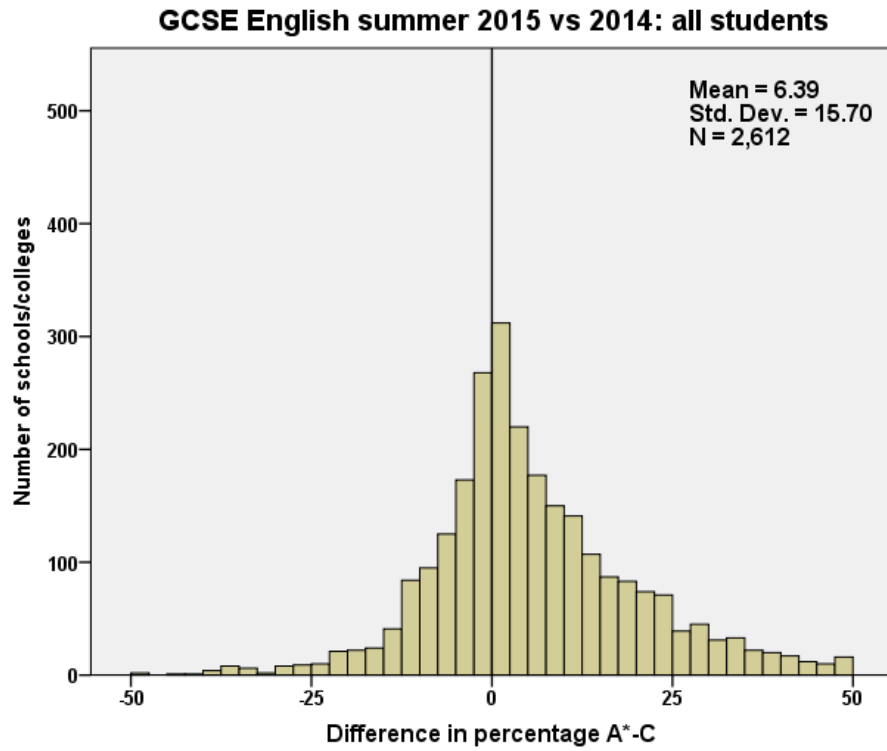
The graphs below show the variation for schools and colleges who entered students to Level 1/Level 2 certificates in summer 2015 and summer 2016. It is greater than the variation seen in GCSE results.

**Level 1/2 Certificates English summer 2016 vs 2015: all students**



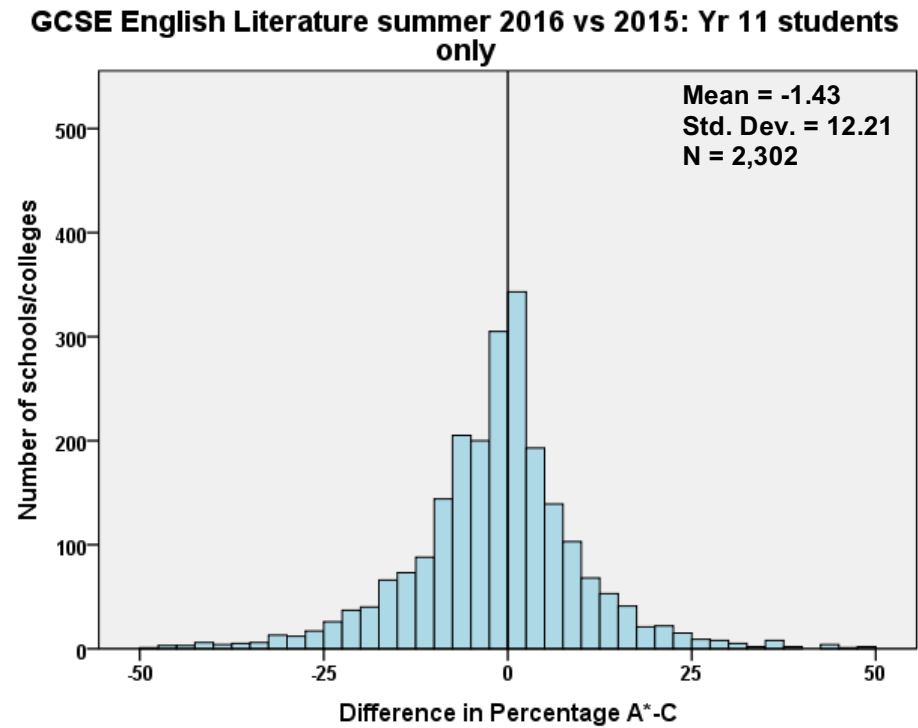
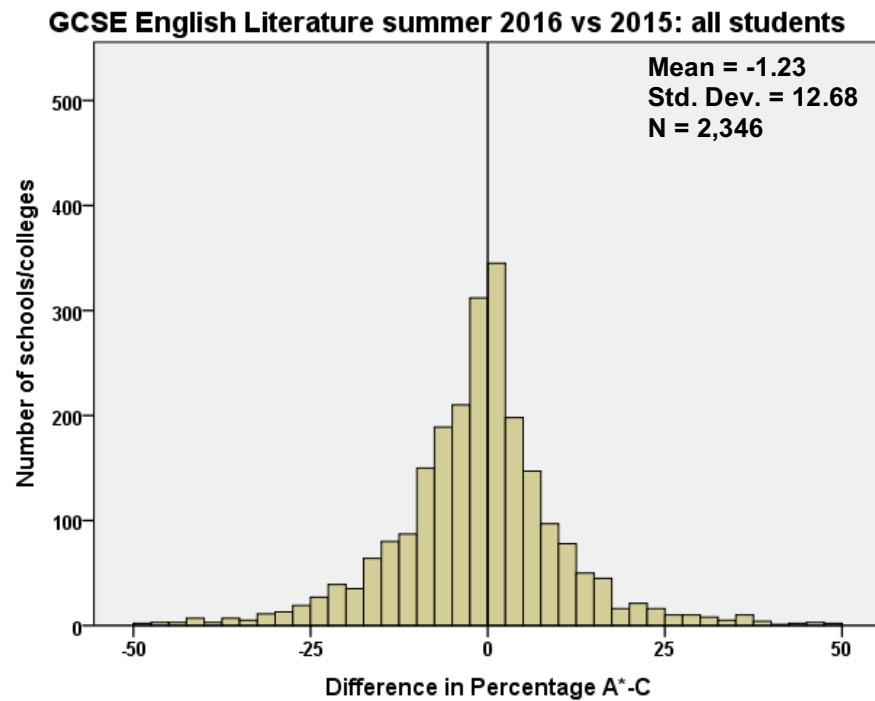
**Level 1/2 Certificates English summer 2016 vs 2015: Yr 11 students only**





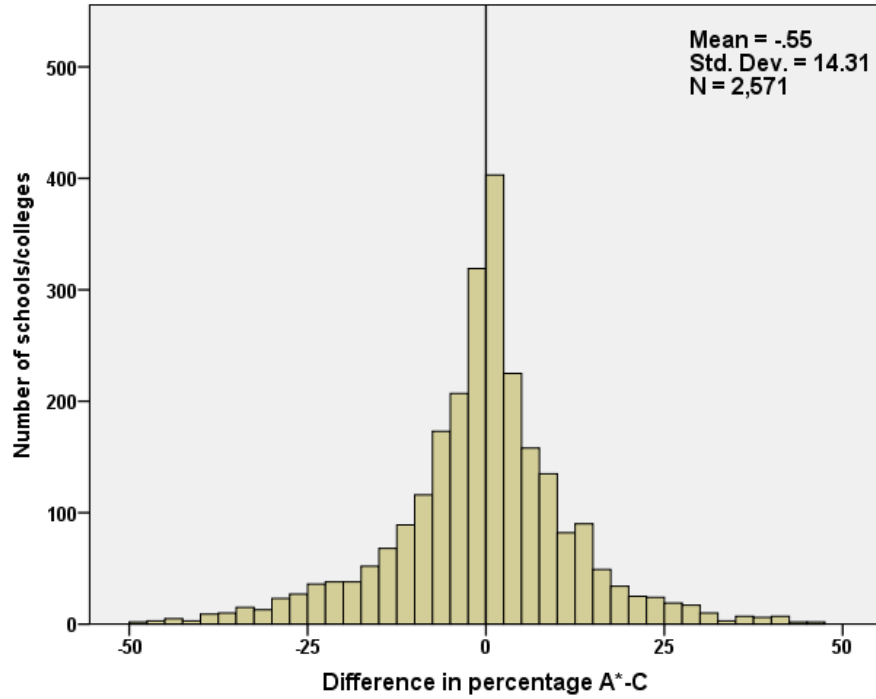
## English literature

The average (mean) variation is slightly higher for 2015/2016 (-1.23) compared to 2014/2015 (-0.55) but the standard deviation is lower (12.68 compared to 14.31) so even though on average schools saw a slight drop in results in 2016 compared to 2015, there is less variation overall. The picture is similar for Year 11 students (shown in blue).

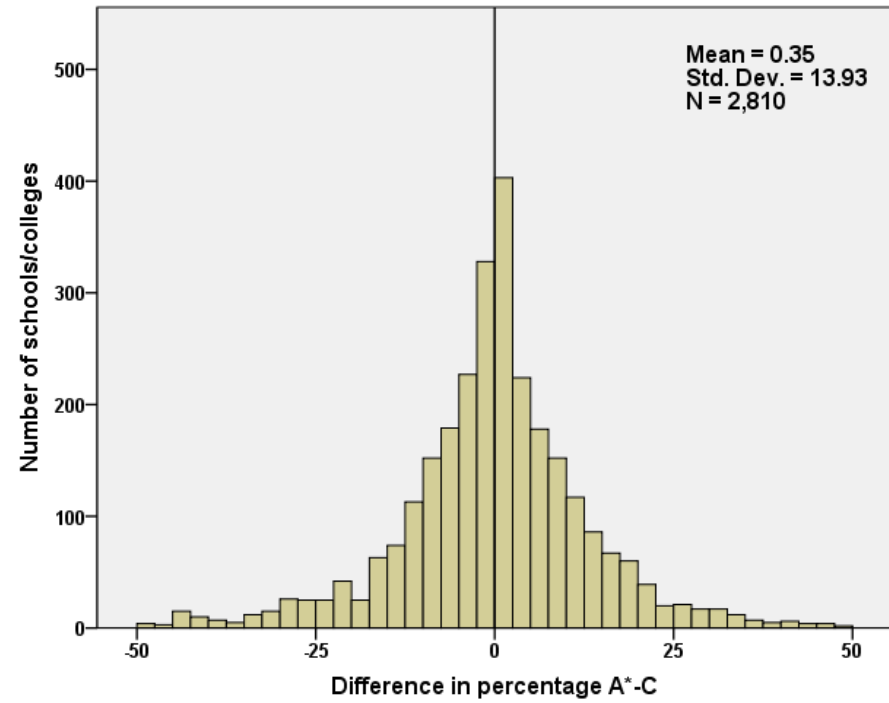




**GCSE English Literature summer 2015 vs 2014: all students**

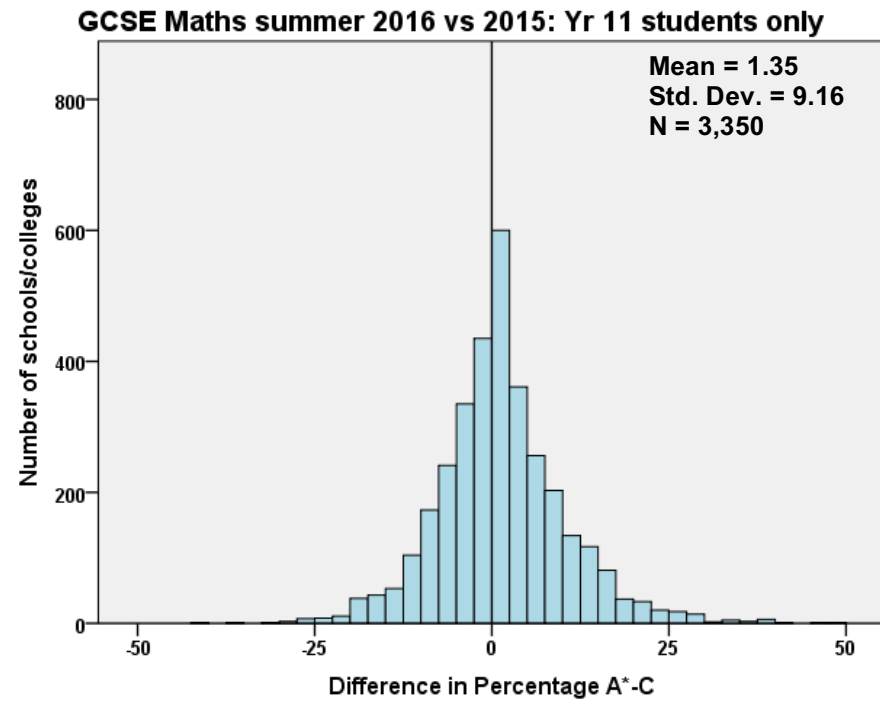
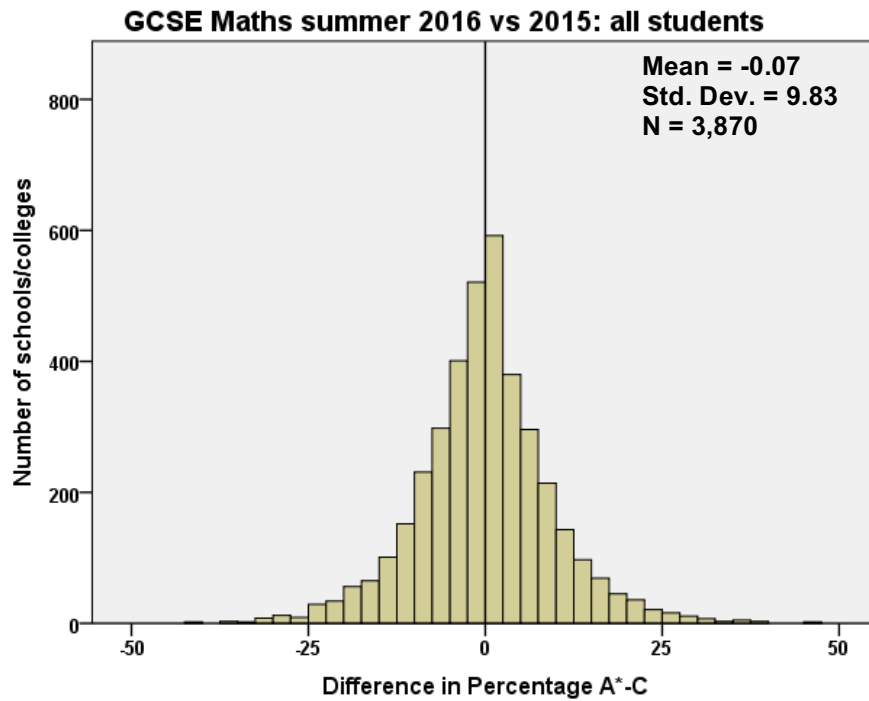


**GCSE English literature summer 2014 vs 2013: all students**



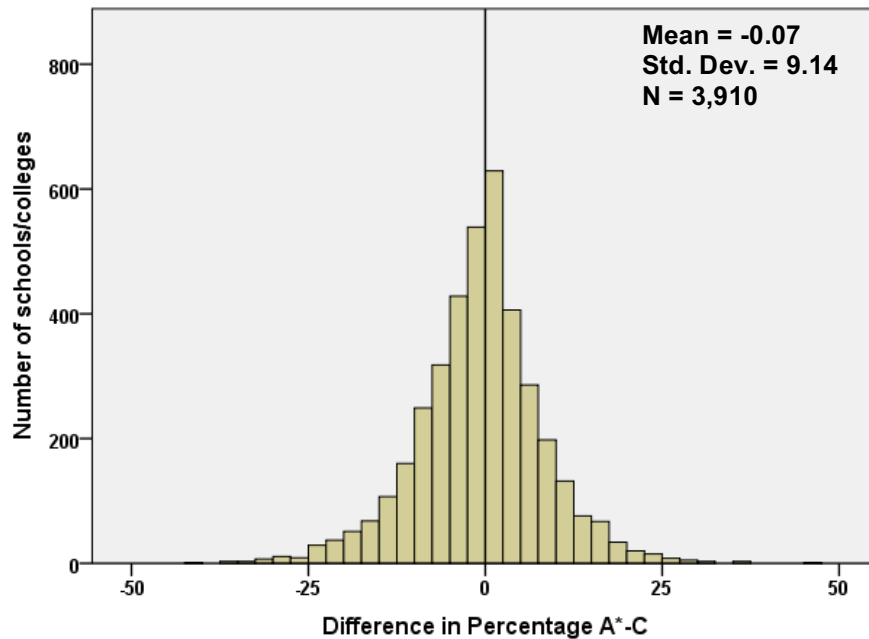
## Mathematics

In mathematics there is less variation in results between 2015 and 2016 than there was between 2013 and 2014 and 2012 and 2013. In general, most schools are clustered around the middle of the graphs, so they see very little variation from one year to the next.

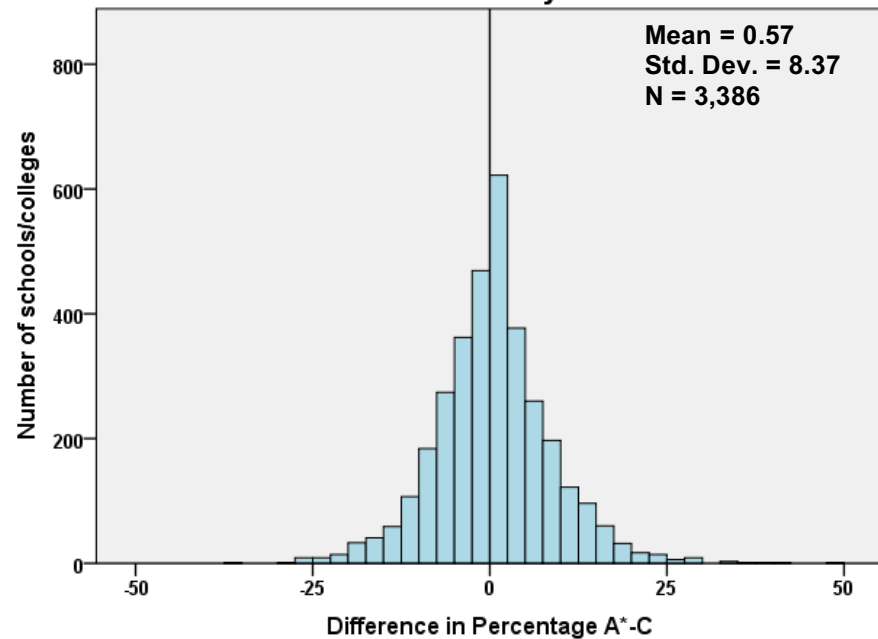


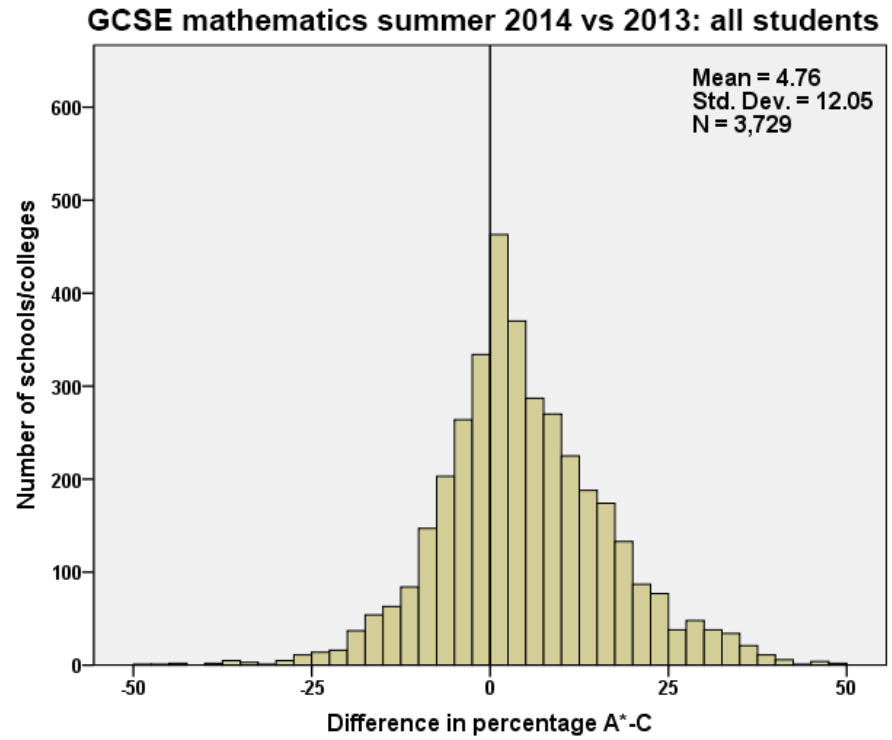
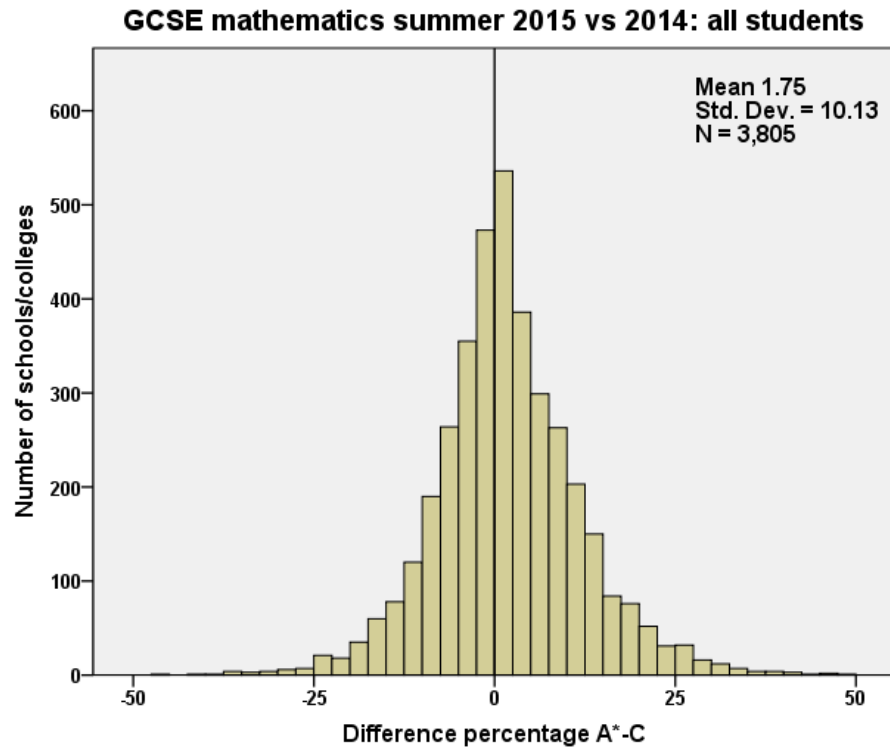
Including students taking Level 1/Level 2 certificates in mathematics has little effect on the overall picture – the average variation remains the same and the standard deviation reduces a little. Slightly less variation is seen for Year 11 students.

**GCSE and Level 1/2 Certificates Maths summer 2016 vs 2015: all students**

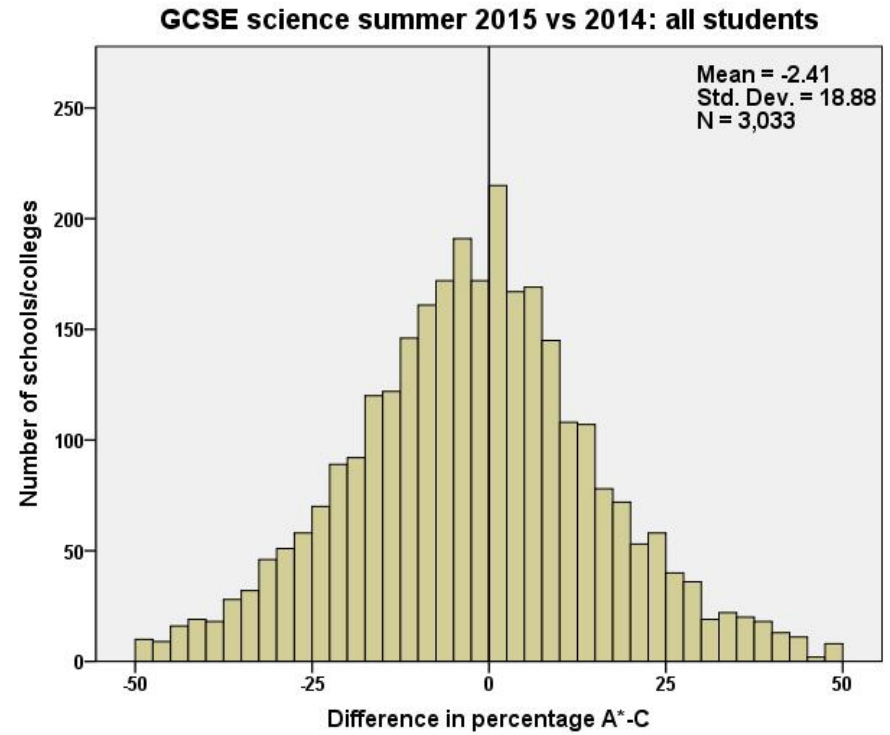
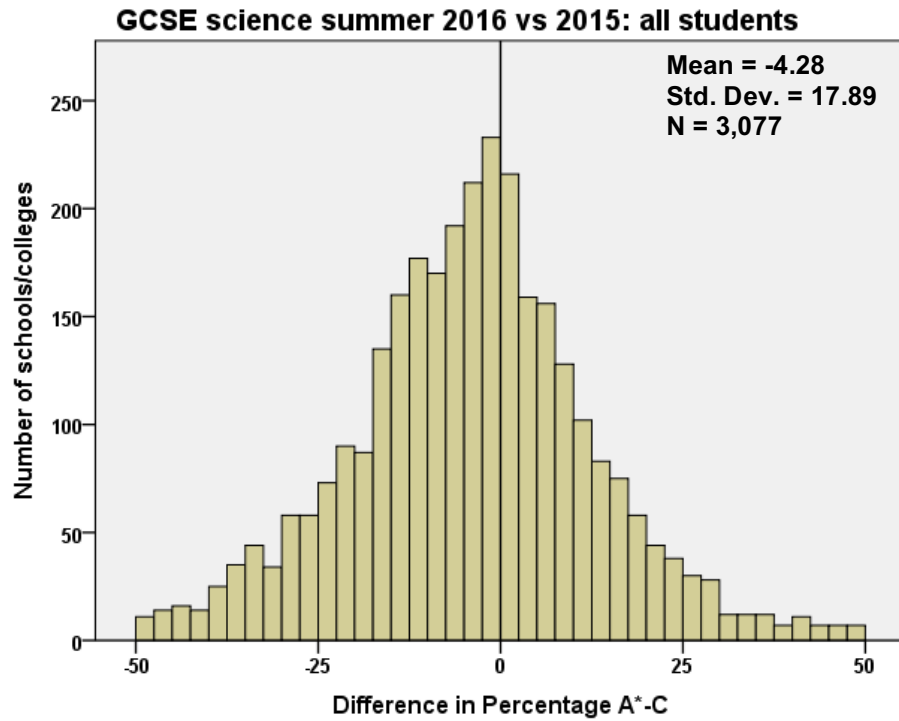


**GCSE and Level 1/2 Certificates Maths summer 2016 vs 2015: Yr 11 students only**



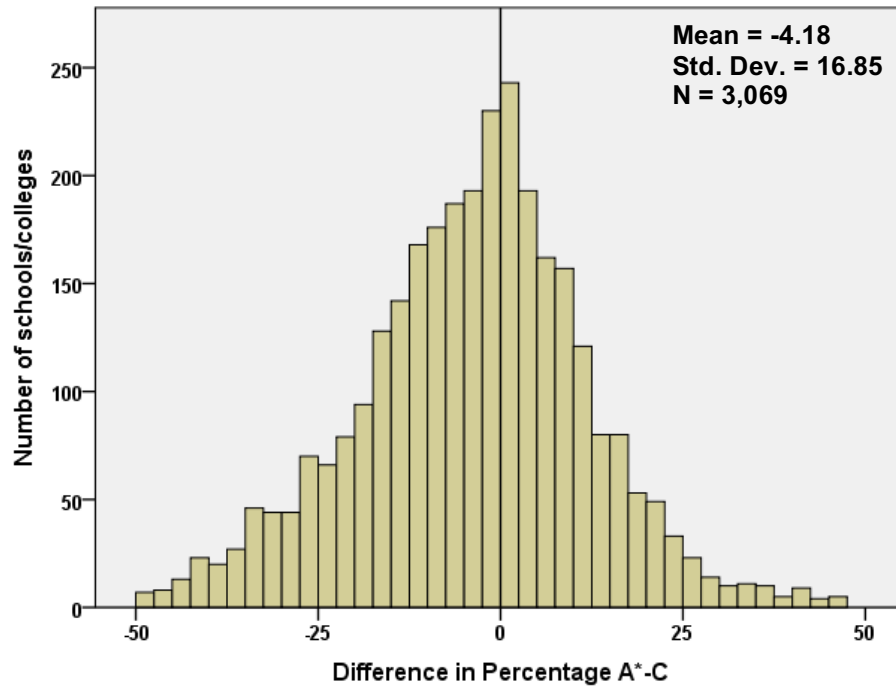


## Science

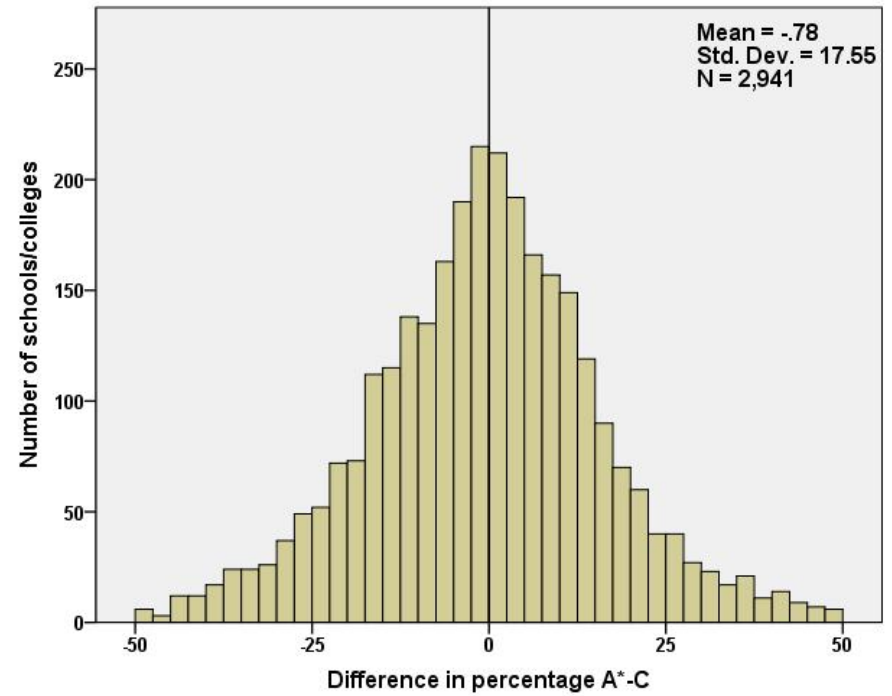


## Additional Science

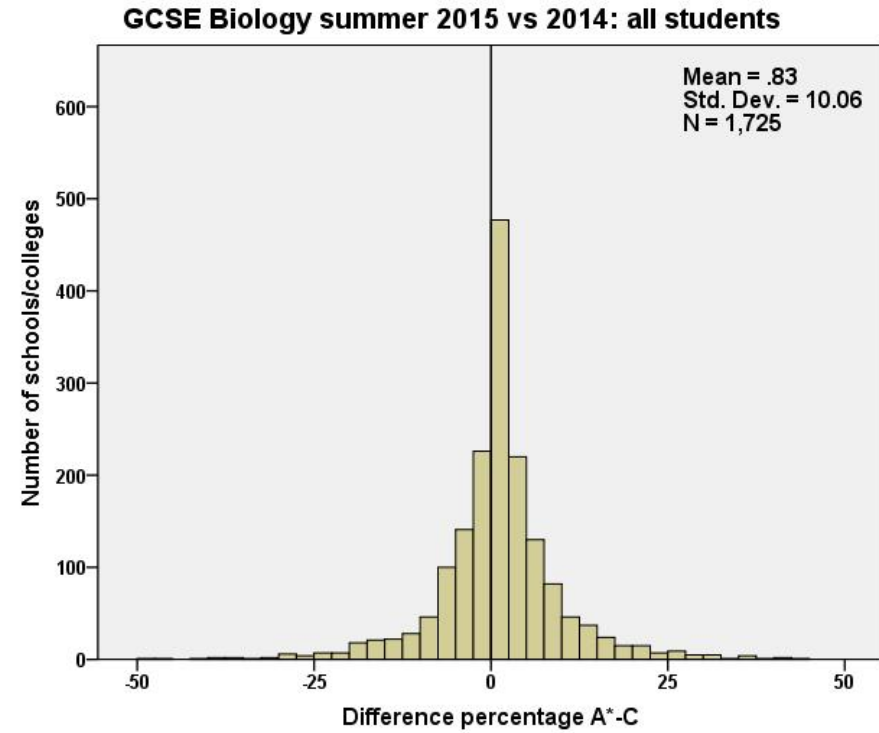
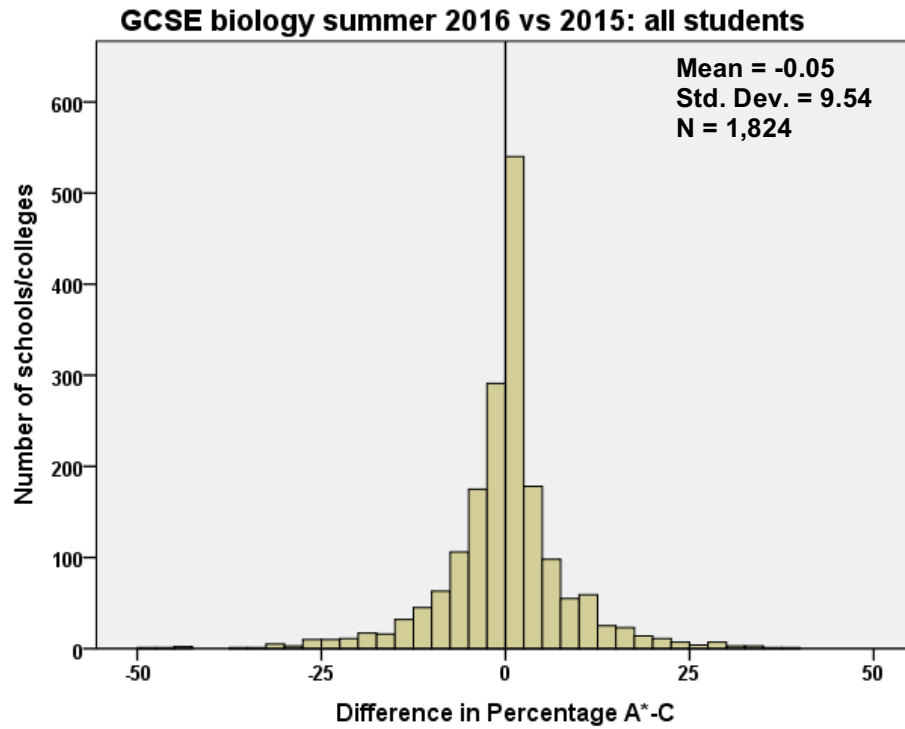
**GCSE additional science summer 2016 vs 2015: all students**



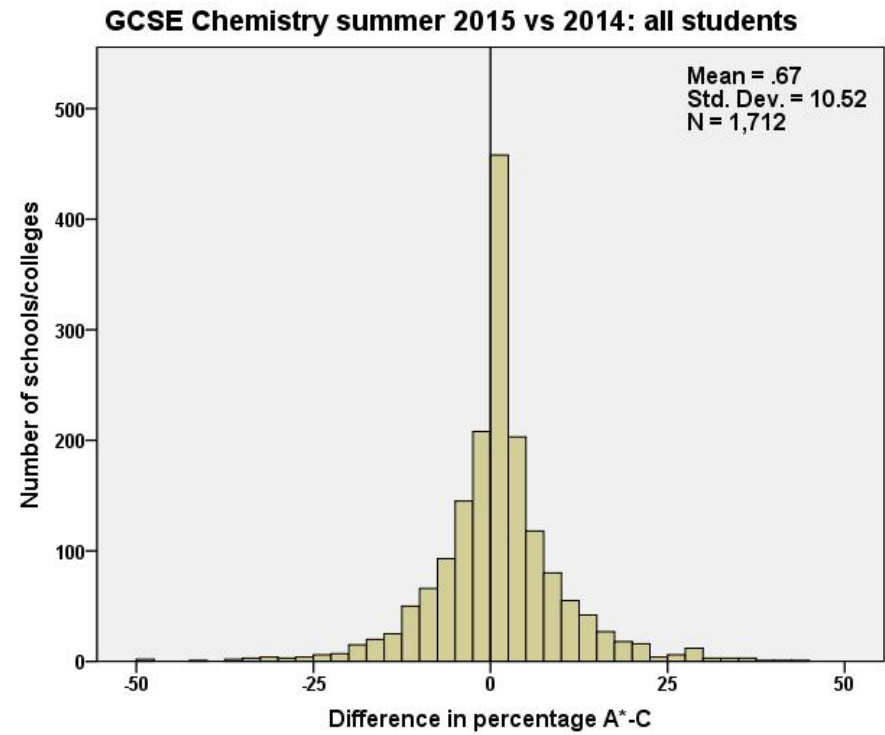
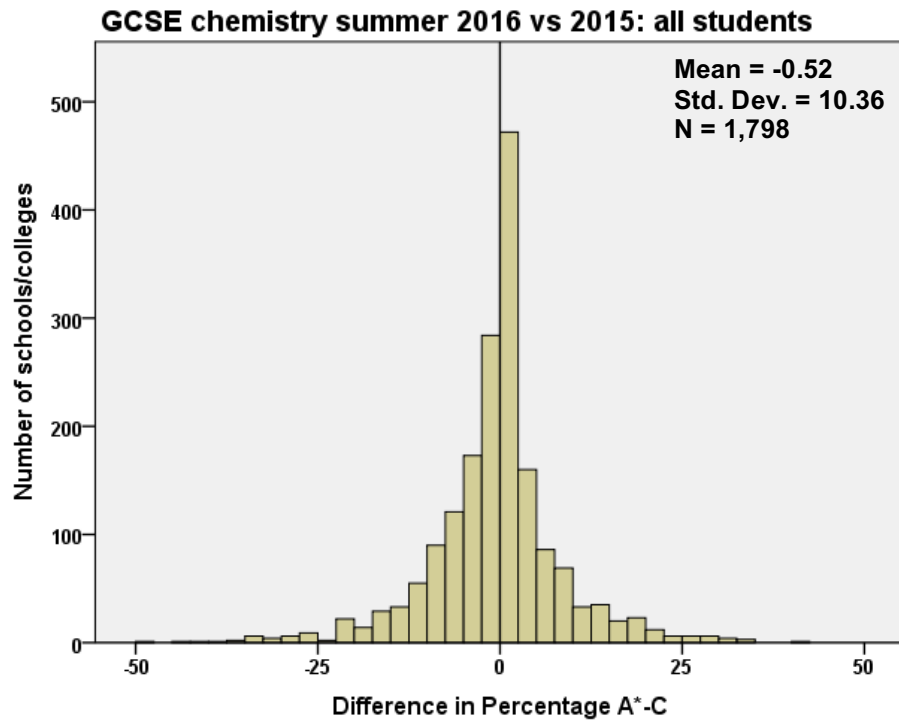
**GCSE additional science summer 2015 vs 2014: all students**



## Biology

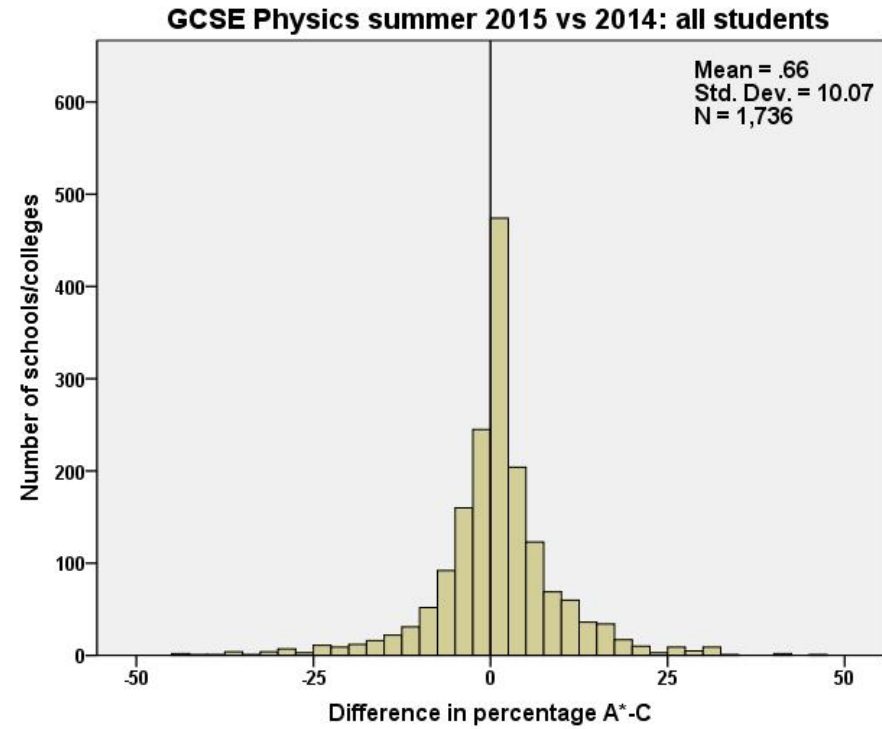
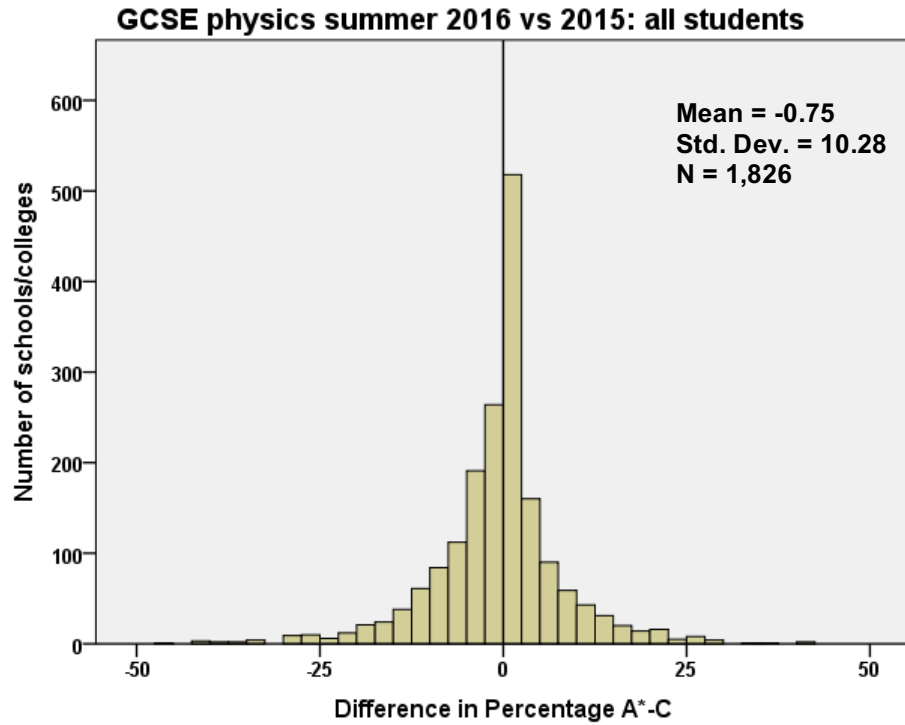


## Chemistry

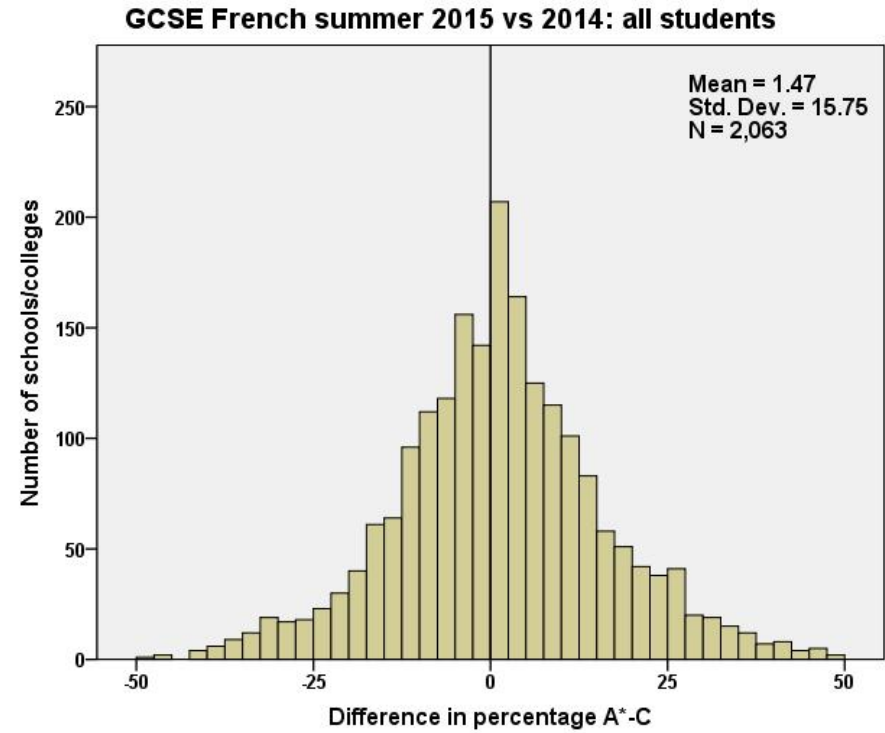
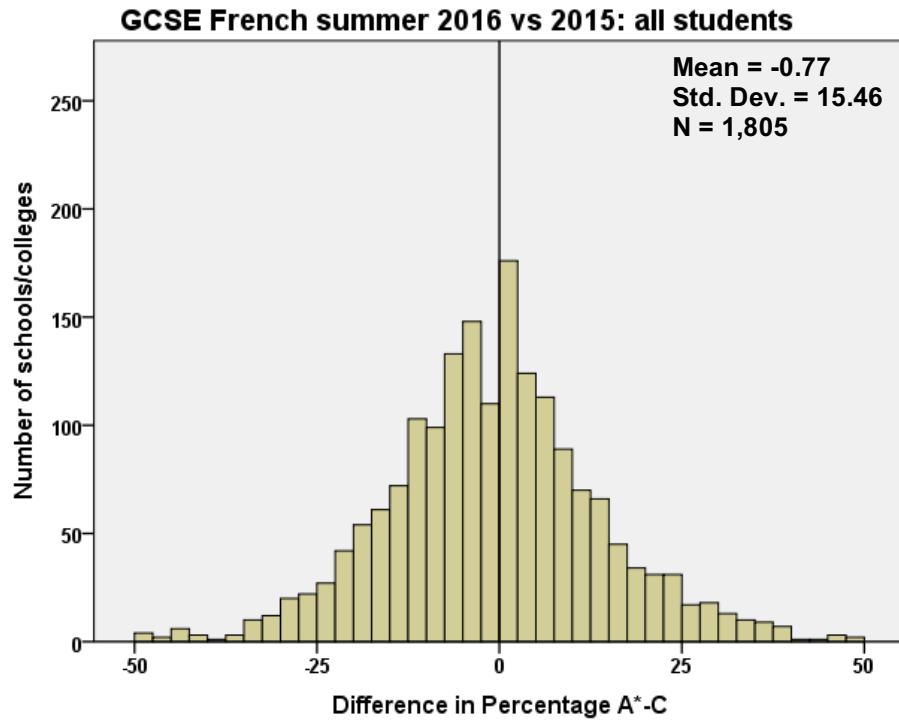




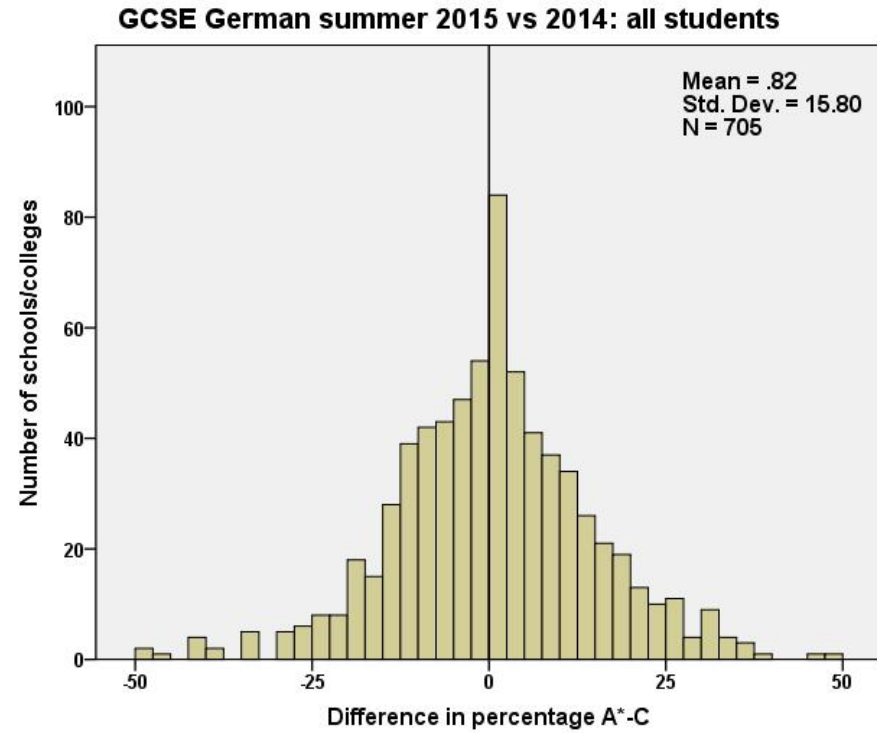
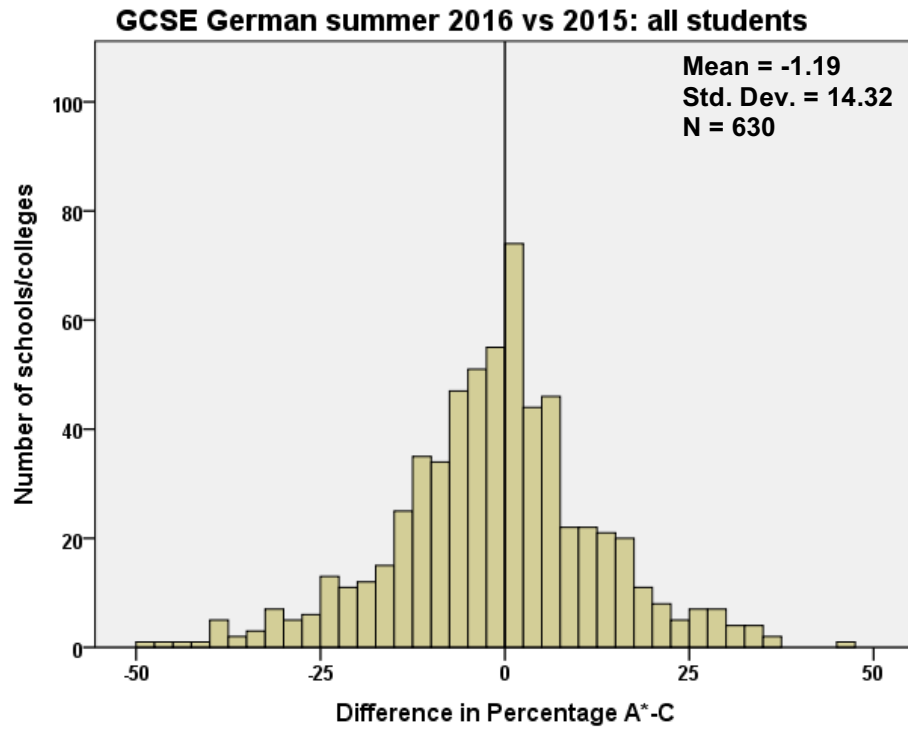
## Physics



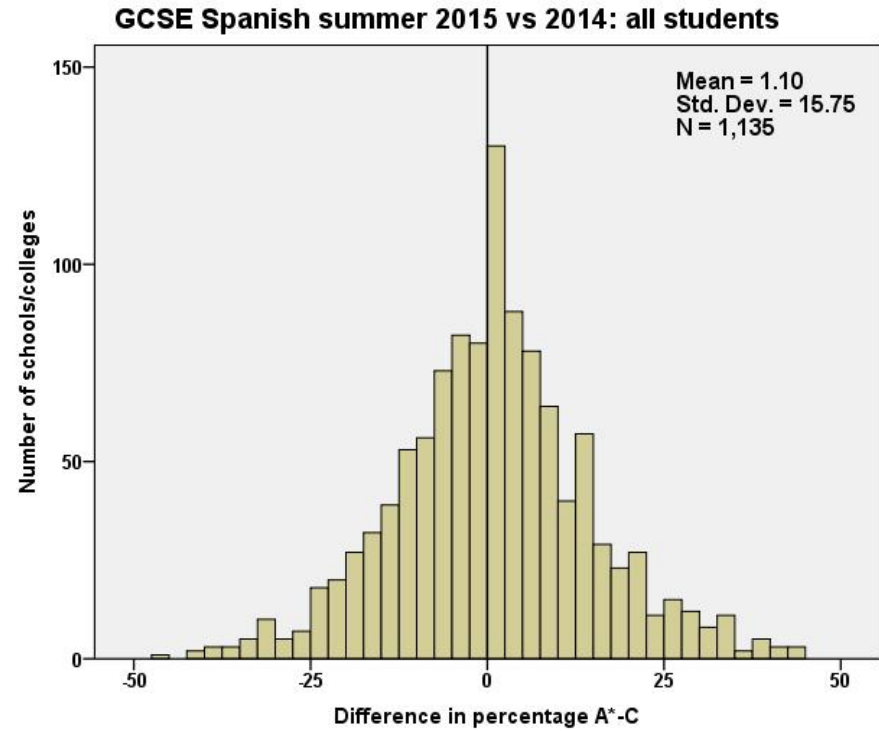
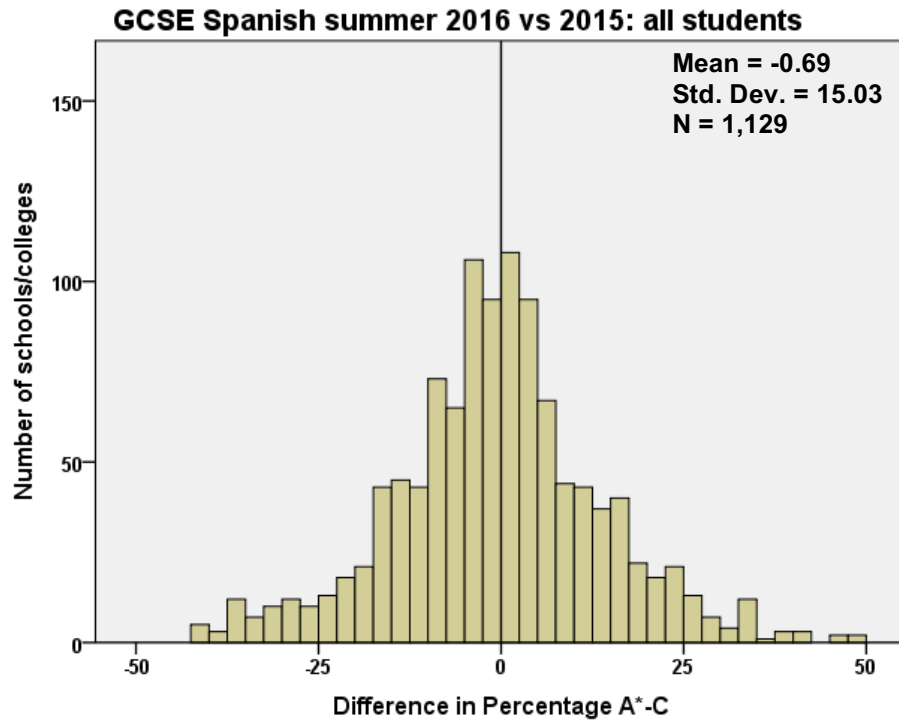
## French



## German

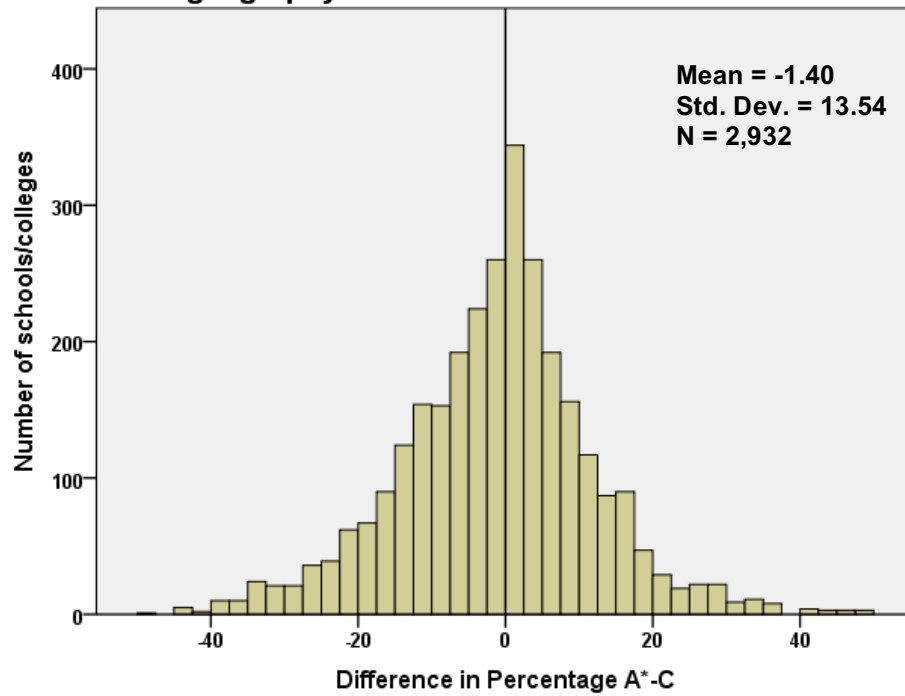


## Spanish

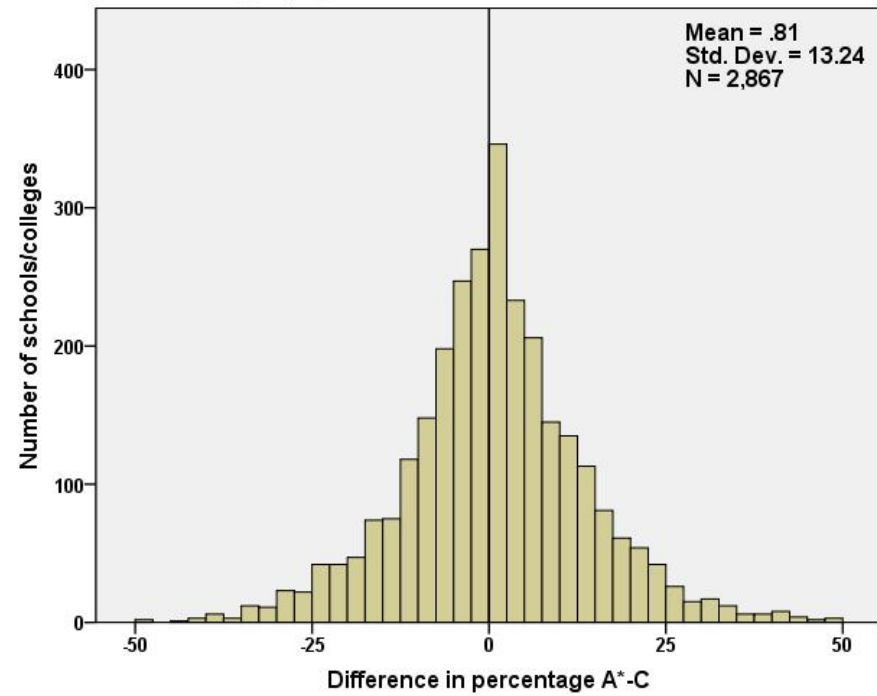


## Geography

**GCSE geography summer 2016 vs 2015: all students**



**GCSE Geography summer 2015 vs 2014: all students**



## History

