

Making the Grade

Introduction and background

Good performance in GCSE examinations is an important gateway to strong life chances for pupils in the UK. Significant reforms to these examinations were introduced in 2015, with the first cohorts taking the new exams in 2017 and 2018. The major changes comprised of more challenging material, a move from modular assessment to a focus on final exams, and a change in the grading system from letters (A*-G), to numbers (9-1). The rationale for the reforms was set out in a letter to Ofqual from the then Secretary of State for education, Michael Gove. The stated aims of the new examinations were: raising educational attainment to match that of high performing jurisdictions; making top grades rarer and therefore more meaningful; and providing a better grounding for full-time study.

This report was written by Simon Burgess and Dave Thomson and published by the Sutton Trust. It explores how the reforms to GCSEs have affected the attainment gap between those from affluent backgrounds and those from poorer families. It uses data covering cohorts of pupils taking GCSEs in state-maintained schools over a period of 3 years straddling the reform. The comparison between pre-reform and post-reform outcomes is based on the following equivalencies: the range 9-4 in the reformed GCSE is equivalent to grades A*-C in the legacy GCSE. The range 9-7 in the reformed GCSE is equivalent to grades A* and A in the legacy GCSE. Disadvantaged pupils are defined as those eligible for free school meals (FSM) at any point in the 6 years up to and including the year in which they reached the end of Key Stage 4.

Key points

Overall change in the attainment gap

- Following the reforms, there was a slight increase in achievement at Grades 9-4 for all pupils. Before the reforms, 52 per cent of entries made by disadvantaged pupils were awarded grades A*-C. The figure for non-disadvantaged pupils was 74 per cent. Following the reforms, the percentage of entries from disadvantaged pupils achieving this benchmark rose by 2.4 per cent; the increase for non-disadvantaged students was virtually identical (2.5%).
- Both before and after the reforms, 10 per cent of entries by disadvantaged pupils were awarded grades 9-7 (A*/A). The attainment rate at this level for non-disadvantaged pupils also remained unchanged at 24 per cent.
- The analysis explored the outcomes for pupils with high prior attainment at key stage 2. Within this group, the proportion of entries by disadvantaged pupils achieving grades 9-4 (A*-C) increased slightly from 55-56 per cent. The percentage of entries by disadvantaged pupils awarded grades 9-7 (A*-A) also rose slightly from 31 per cent to 32 per cent. Increases amongst the group of non-disadvantaged pupils were similar – 47 to 48 per cent for grades 9-4 and a stable 47 per cent at grades 9-7.
- Whilst changes in the attainment gap at grades the 7(A) and 4(C) boundaries were minimal, more detailed statistical analysis revealed that there are potential impacts at other grade boundaries. Under the previous system, 2 per cent of entries by disadvantaged pupils resulted in a grade 9, whereas the post reform figure is just 1 per cent. This drop is smaller for non-disadvantaged pupils with a fall from 8 per cent under the old system to 5 per cent post-reform.
- Non-disadvantaged pupils were 1.42 times more likely than disadvantaged pupils to achieve grade C or above under the old system, but they are now 1.63 times more likely to achieve grade 5 or above.

Subject level analysis

- There has been a one percentage point drop in the proportion of entries by disadvantaged pupils failing to achieve a standard pass (grade 4/C) in English. The same is true for maths where the proportion failing to reach a standard pass has decreased from 49.8 per cent in 2016 to 48.8 per cent in 2018.
- These decreases were similar for the whole cohort of pupils. In 2018, 24.5 per cent of all pupils failed to reach grade 4(C) in English compared to 25.2 per cent in 2016. In maths, 30.5 per cent of all pupils failed to reach grade 4(C) in 2018, compared to 31.3 per cent in 2016.
- The data was further analysed at subject level to see whether the reforms had widened or narrowed the attainment gap. There were positive effects (i.e. a narrowing of the gap) for a number of subjects including English literature, English language and religious studies.
- There were, however, negative effects for a larger number of subjects including dance and drama. There were significant negative effects for all 3 sciences. The effect for maths was nil.

Conclusions

- The central finding of this research is that the reform has increased the GCSE test score gap between disadvantaged and non-disadvantaged pupils. The change is small, at an average of 0.02 standard deviations per subject, but it is statistically significant.
- The results showed that the worsening of the gap is found among pupils with middle levels of prior attainment- those who were at level 4 on average in Key Stage 2 reading and maths tests. The effect of the reform on disadvantaged pupils with higher levels of prior attainment was neutral.
- It is at the grade 5 boundary where most of the negative effect of the reform on disadvantaged pupils occurs. As mentioned above, non-disadvantaged pupils were 1.63 times more likely to achieve grade 5 or higher following the reform whereas they were 1.42 times more likely to achieve grade C or higher beforehand. This will matter if grade 5 (designated as a 'strong pass') becomes the expected standard for progression to post-16 courses or even in university admission.
- These are short run results, generated shortly after implementation of the changes. The longer-term picture may differ for 2 reasons. Firstly, both teachers and pupils might adapt to the more challenging curriculum, and scores could improve. The nature of any further changes in the GCSE attainment gap depends on who adapts the best: disadvantaged or non-disadvantaged pupils; and the teachers of disadvantaged pupils or the teachers of non-disadvantaged pupils.

The full document can be downloaded from:

<https://www.suttontrust.com/research-paper/making-the-grade/>