

A Review and Evaluation of Secondary School Accountability in England

Introduction and background

The introduction of the Progress 8 measure in 2016 marked a shift from a measure based on attainment (5 GCSE passes) to one based on progress. This change had long been called for. The previous system had been widely criticised for failing to account for differences in pupil attainment at the end of primary schooling. This article, written by researchers from the University of Bristol, FFT Education Datalab, and UCL, reviews and evaluates the 'Progress 8' measure and makes recommendations for further improving the Progress 8 measure and school accountability.

Key findings

Attainment 8 and Progress 8: Overview

- A pupil's Attainment 8 score is their total score across 8 subject qualifications, where each qualification is assigned a score corresponding to the 9-1 grade system. The 8 subject qualification slots are: English and maths (double weighted to reflect the priority the Government places on these subjects); 3 further subjects that count in the English Baccalaureate (Ebacc: a set of subjects deemed by the Government to stand pupils in good stead for future study and career options; and 3 additional subjects not already counted (the 'Open' slots). The Ebacc subjects are English, maths, the sciences, the humanities (geography or history), and a language. Thus, for example, a pupil with an Attainment 8 score of 90 achieved eight grade 9 GCSEs. A school's Attainment 8 score is the average of their pupils' Attainment 8 scores.
- A pupil's Progress 8 score is calculated as the difference between their Attainment 8 score at the end of KS4 and the average Attainment 8 scores among all pupils nationally who had the same prior attainment as measured by pupils' average key stage 2 (KS2) test scores. A school's Progress 8 score is the average of their pupils' Progress 8 scores. Thus, positive, zero, and negative scores are interpreted as schools where pupils are progressing more rapidly, similarly, or less rapidly than pupils nationally.
- Progress 8 scores are presented with 95 per cent confidence intervals to convey a range of plausible values for the true performance of each school and to test whether the true performance differs from zero. Confidence intervals give a sense of the degree to which a school's observed Progress 8 score might vary across different random samples of pupils. The smaller the number of pupils, the wider the confidence interval.
- The DfE places schools in bandings on the basis of their Progress 8 score and 95 per cent confidence interval. The bandings are: 'Well above average' (about 14% of schools in England in 2019), 'Above average' (17%), 'Average' (37%), 'Below average' (20%), and 'Well below average' (12%).

Attainment 8 and Progress 8: Strengths

- Unlike the previous A*-C measure, Attainment 8 is a continuous measure and so all grades contribute to the overall score. Therefore, Progress 8 incentivises schools to focus on all children, rather than just those at the old C/D borderline.
- The 2011 Wolf review recommended a reduction in the range of qualifications eligible for school performance measures, arguing that students in some schools were being entered for qualifications that were not sufficiently 'rigorous', offering limited potential for future education and work. In response, Attainment 8 is heavily weighted in favour of Ebacc subjects. This has led to increased uptake of Ebacc subjects and increased commonality in the subjects entered by students across schools. This has, in turn, made it harder for schools to 'game' the system by entering pupils for vocational 'easy' non-GCSE options.

Attainment 8 and Progress 8: Weaknesses

- Although, as mentioned above, the Attainment 8 scale takes all grades into account, it may not hold equal meaning at all points. Is, for example, the effort required to



move pupils between a 4 and a 5 the same as between an 8 and a 9? To the extent to which there are differences, Progress 8 may still generate incentives to concentrate on pupils at specific points in the distribution.

- The emphasis on EBacc subjects in the school accountability system has also raised concerns over equality of access and effects on other subjects. Research has highlighted the disadvantage gap in entry rates to EBacc subjects. Schools serving more disadvantaged students may find it harder to fulfil targets associated with the EBacc and may also find it harder to recruit teachers of EBacc subjects.
- There are concerns over whether the subject set is too restrictive or suitable for all students and schools, such as University Technology Colleges which focus on vocational qualifications.
- School staff have reported a negative impact of Progress 8 and the focus on EBacc subjects on arts subjects.
- Progress 8 takes into account attainment at KS2. This can be problematic. Since KS2 scores are based solely upon performance in English (reading) and mathematics, the Progress 8 measure is comparing pupil performance in different subject mixes at the start and end of secondary schooling.
- As with any attainment measure, KS2 test scores will contain measurement error which will lead to positive or negative influences on value-added scores. For example, achievement in the 11-plus test (determining entrance to a selective school) does not always align with higher KS2 scores, so the progress made by students with lower KS2 attainment who nonetheless pass their 11-plus and progress to grammar schools is exaggerated.
- A consistent critique of Progress 8 is that even though it adjusts for prior attainment, it still punishes and rewards schools for serving educationally disadvantaged or advantaged intakes, as other pupil characteristics related to performance are not considered. Leckie and Goldstein found that a third of schools in 2015-16 would change Progress 8 bandings were the government to introduce a pupil background adjusted Progress 8 measure.
- The current approach to Progress 8 also ignores potential interactions between pupil characteristics, such as that identified for economically disadvantaged White British pupils, who perform disproportionately worse than their advantaged counterparts. Schools serving large proportions of disadvantaged White British pupils will likely be especially penalised by Progress 8. This might partly explain regional patterns of low performance shown for schools in the North East and coastal schools.
- Some schools have larger number of pupils with missing Attainment 8 or KS2 scores. Under Progress 8, schools are not held accountable for these pupils' scores. Neither are they accountable for pupils who might spend the first 4 years of their secondary education in one school and then move. Ignoring pupil mobility may be incentivising off-rolling, a gaming practice which removes students from a school through unofficial channels to improve scores on performance metrics. Off-rolling has been increasing in recent years.
- Analysis by FFT Education Datalab (2018c) showed that accounting for mobility reduced the advantage seen on average in London schools.

- Progress 8 disadvantages school types with non-standard age-ranges, holding them to the same standard as schools teaching throughout secondary schooling, despite having less time with students in which to influence performance.
- Schools are only part of the explanation for why some pupils progress more rapidly than others. If this is not well understood, there is risk that too much attention is placed on comparing school Progress 8 scores when much of the potential for increasing pupil progress lies within rather than between schools.
- Progress 8 scores and confidence intervals in their current format, are difficult for users to understand and interpret – it may be preferable to express them in terms of GCSE grades or additional months learning.
- There are several elements which are not captured within the existing Progress 8 measure and which could be better captured through alternative statistical models. These include performance over time, the level of variability in the performance of pupils within a school, and the likely future performance of a school.
- The cancellation of 2020 and 2021 KS2 due to COVID-19 tests will also prevent Progress 8 from being published in its current format in 2025 and 2026, as the necessary prior attainment measure will not be available. There are also concerns that schools could be unfairly penalised due to the differential influence of lockdown on different pupil groups. Differences in Progress 8 arising from differences in the composition of pupil characteristics are likely to be exaggerated in 2022, heightening the need to adjust for student background characteristics.

Recommendations

- Present a less EBacc focused Progress 8 measure alongside Progress 8 to present a more holistic picture of school performance relevant to more schools and pupils.
- Present a pupil background adjusted Progress 8 measure alongside Progress 8 to provide a picture of school performance informed by school context.
- Recognise pupil mobility by making school Progress 8 scores an average of all pupils who attended each school, weighted by their time in each school.
- Communicate more clearly the relative importance of school Progress 8 scores in explaining the overall variation in pupil progress and the magnitude of each school's individual Progress 8 score.
- Increase warnings regarding the substantial uncertainty in using Progress 8 to predict the future performance of schools.
- Report multiyear averages for Progress 8 alongside current single year summaries to illustrate and combat the instability of school performance over time.

The full document can be downloaded from:

http://www.bristol.ac.uk/media-library/sites/education/documents/bristol-working-papers-in-education/working_paper_prior_2021.pdf