

Executive summary

This report provides a thorough examination of the socio-economic disadvantage attainment gap in England in 2023/24, exploring how and why educational inequalities emerge and widen across different phases of education. Exploiting the rich potential of the National Pupil Database (NPD), the research updates and extends previous work by the Education Policy Institute (EPI).¹

It takes a significant step forward by extending our earlier work's research design to incorporate a much richer set of drivers of the disadvantage gap. Through detailed linkage of individuals' attainment, demographic backgrounds, Special Educational Needs and Disabilities (SEND) histories and experiences of disrupted schooling, we construct dynamic measures to explore how inequalities accumulate from the early years through to post-16 education. In contrast to earlier work, we also introduce new cohort and institution-level indicators – capturing peer composition, collective experiences of absence and exclusions, and whole-school contexts – to understand how the environments in which children and young people learn to shape their outcomes over and above individual characteristics.

By combining these new measures with statistical decomposition models, we aim to provide a more in-depth assessment of the mechanisms through which disadvantage operates. This enables us to quantify the extent to which the gap can be explained by differences in disadvantaged students' characteristics and the extent to which it arises from differential impacts of these characteristics, including factors not captured in administrative data. Together, these innovations offer the most comprehensive national breakdown to-date of the 2023/24 disadvantage gap.

Research

Our research provides new insights into the key influences on educational inequalities by addressing two key questions. First, what factors are associated with lower attainment among disadvantaged children and young people at ages five (Early Years Foundation Stage [EYFS]), 11 (key stage 2 [KS2]), 16 (key stage 4 [KS4]) and in 16-19 education? Second, how much of the disadvantage gap at each key stage in 2023/24 can be attributed to different factors at a student, cohort and institutional level?² Although the effects in our analysis are associative rather than causal, our research helps identify the most important factors in shaping the national gap and inform priorities for where policy development should be focused.

Early years

- On average, disadvantaged pupils are already 4.6 months behind their peers by the end of EYFS.³ Differences in pupils' (observable) characteristics – related to sex, SEND status, ethnicity, first language and months of birth – explain only 30 per cent of this early year's gap. Likely key factors missing from the model include the home and family environment, early education and care, and interactions with children's services.
- Being identified as having SEND is the single most important contributor to the disadvantage gap at age five, adding 2.4 months, noting that this association is not necessarily causal as EYFS assessments can themselves inform SEND identification. Not only are disadvantaged pupils more likely to be identified with SEND (adding 1.2 months to the gap), but the attainment penalty associated with SEND is larger for disadvantaged pupils (adding another 1.1 months to the gap).
- Cohort and school characteristics each make comparatively small contributions to the early years gap, of under 0.3 months (or under five per cent). For example, disadvantaged pupils are more likely to be in a reception year with a higher proportion of peers with identified SEND and this narrows the gap by 0.2 months; they are also more likely to attend a school with a higher overall absence rate which adds 0.1 month to the gap.

Primary school

- By the end of primary school, disadvantaged pupils are 10.1 months behind. The majority (73 per cent) of this gap can be explained by differences in pupils' (observable) characteristics.
- The lower prior attainment of disadvantaged pupils is the largest contributory factor, adding 4.4 months to the gap, noting that prior attainment encapsulates wide-ranging influences, including early development needs, health and unidentified SEND.
- The size of the KS2 gap is strongly associated with disadvantaged pupils having already fallen behind in reception year in literacy, mathematics, and communication and language.
- The higher prevalence of identified SEND for disadvantaged pupils contributes another 1.3 months to the gap. Together this highlights how the accumulation of inequalities by early primary school continues to affect children's attainment outcomes at the end of primary school, though only some of these may be amenable to education policy.
- Disrupted schooling also plays an important role, notably pupil absence. On average, pupils with even moderate levels of absence are 1.9 months behind their peers with below average absence.⁴ This overall 'absence penalty' is even greater for disadvantaged pupils, who are also much more likely to be absent than their peers. Taken together, absence contributes 2.2 months (around one-fifth) to the KS2 gap.
- Cohort and school characteristics are less important influences on the KS2 gap than student characteristics, all making modest contributions of under 0.4 months (or under four per cent).

Secondary school

- By the time they take their GCSEs, disadvantaged students are 17.9 months behind their peers. Much of this gap (87 per cent) can be explained by differences in the characteristics of disadvantaged students.
- By far the largest contributor to the KS4 gap is the lower prior attainment (at age 11) among disadvantaged pupils, adding 6.8 months to the gap. Prior attainment at age seven (key stage 1 [KS1]) also contributes (1.6 months) over and above KS2 attainment, reinforcing that early intervention has a 'protective' factor against gap-widening later on.
- Differences in disadvantaged pupils' attainment in core subjects (mathematics and English) at KS2 are strongly associated with the size of the KS4 gap.
- Disrupted schooling, principally student absence, is the second most important influence. Disadvantaged students both miss more school than other students and experience a greater attainment penalty when they do. Together, this accounts for 6.1 months (or one-third) of the gap. Other forms of disruption – suspensions, permanent exclusions and school moves – are also each associated with lower attainment (with each incidence lowering pupil attainment by at least one month) but because these affect far fewer students, they make a smaller contribution to the national gap.
- Ethnicity emerges as another important contributor, accounting for around 1.5 months of the gap. The association between ethnicity and GCSE attainment differs between disadvantaged and non-disadvantaged students, with disadvantaged White British students making some of the slowest progress during secondary school.
- We also consider the attainment gap for those students who are persistently disadvantaged. These are the subset of disadvantaged students who have been eligible for free school meals (FSM) for at least 80 per cent of their time in school. This gap is larger still at 21.3 months but the contributors to the gap are broadly

16-19 education

- By the end of their 16-19 education disadvantaged students were 3.5 grades behind their peers across their best three qualifications, with 79 per cent of this gap explained by differences in the characteristics of disadvantaged students.⁵
- The majority of the 16-19 disadvantage gap reflects inequalities that have accumulated earlier in the education system. Differences in prior attainment up to age 16 explain around 70 per cent of the total gap, underlining the lasting impact of attainment gaps that emerge in the early years, primary and secondary school.
- Within KS4 subjects, the ‘open-slot Attainment 8’ measure of prior attainment contributes most to the 16-19 gap, even more than KS4 English or mathematics.
- Cohort characteristics also contribute to the gap. Disadvantaged students are more likely to study in settings with lower average prior attainment and higher concentrations of disadvantage and SEND, which is associated with lower overall outcomes. This likely reflects the greater level of selection in the 16-19 phase. These differences in context account for around 10 per cent of the total gap.
- As in earlier phases, ethnicity contributes to the gap, with evidence that the relationship between ethnicity and attainment differs for disadvantaged students. In the 16-19 phase, this pattern is driven largely by lower progress among disadvantaged White British students.

Cross-phase themes

Several themes emerge when considering the gap across phases. Overall, the story is one of disadvantage accumulating as children and young people progress through education and, while data inconsistencies mean it is difficult to make direct comparisons across phases, the nature of what is driving the gap appears to evolve:

- Across all phases after reception year, prior attainment is the single biggest contributor to the disadvantage gap. While prior attainment at age five contributes 40 per cent of the KS2 gap, by the time pupils take their GCSEs, earlier attainment (across ages 5, 7 and 11) collectively accounts for 44 per cent of the KS4 gap. In the 16-19 phase – when we can additionally account for GCSE attainment, prior attainment explains the majority of the gap. This underscores the extent to which post-16 inequalities are carried forward from earlier schooling.
- Although it is difficult to isolate the exact contribution of any single subject to the gap – as students who perform well in one subject tend to do well in others – attainment in both mathematics and English-related subjects is strongly associated with the gap across phases.
- Disrupted schooling – notably pupil absence – plays a progressively larger role as children progress from primary to secondary school. Absence contributes around one-fifth (21 per cent) of the gap at KS2, rising to one-third (34 per cent) by KS4.
- Identified SEND emerges as the single largest measurable contributor to the EYFS gap, but this partly reflects the limited administrative data available on young children’s early environments. By KS2, our richer SEND measure based on pupils’ histories remains a key contributor (accounting for 15 per cent of the gap). While its direct role diminishes by KS4 and post-16, this is partly because earlier SEND-related needs have already shaped prior attainment, which becomes the dominant pathway through which SEND contributes.

- Across phases, there is important variation in attainment outcomes *within* the group of SEND learners. When children with SEND have timely identification and sustained support, their attainment outcomes can be at least as good as their peers with similar prior attainment and other characteristics.
- In contrast to later ages, disadvantaged pupils attain better at ages 5 and 11 when they are in disadvantaged settings and this helps to slightly narrow the gap. This suggests that, other things being equal, it is disadvantaged pupils in less disadvantaged primary schools who could be at more risk of low attainment than other disadvantaged pupils.
- Other cohort-level characteristics make only small (or non-existent) contributions to the gap across phases including size of year group, the percentage of the cohort with English as an Additional Language and the percentage of the cohort in lower-attaining ethnic groups.
- Similarly, institution-level characteristics make only small (or non-existent) contributions to the gap, noting that higher school absence rates make small contributions to the gap at ages 5, 11 and 16, over and above a pupil's own absence rate.
- Across all phases, cohort and institution-level measures make smaller contributions than individual-level factors, though cohort effects grow in importance with age, consistent with developmental evidence that peer influences strengthen in adolescence. Notably, differences in the composition of 16-19 cohorts – in relation to disadvantage, SEND and prior attainment – collectively contribute around 10 per cent to the 16-19 gap.
- Ethnicity contributes to the gap at every phase. This pattern is driven in part by the comparatively lower progress of disadvantaged White British pupils, an effect that persists throughout the system.

¹ <https://epi.org.uk/publications-and-research/breaking-down-the-gap/>

² We present attainment gaps using a 'months of learning' measure up to KS4 and a grade gap measure in the 16-19 phase, using established methodologies as defined in EPI's 2025 Annual Report: <https://epi.org.uk/annual-report-2025/>

³ The gaps presented in this report may differ slightly from those in EPI's 2025 Annual Report (<https://epi.org.uk/annual-report-2025/>), as they are based on the subset of individuals who have complete data for all variables in our models. Further details can be found in Annex B.

⁴ Moderate absence is defined as an absence rate between the national average but below 10 per cent – the level at which a pupil is considered persistently absent in official statistics.

⁵ EPI uses a separate methodology for the 16-19 gap which is measured in A levels equivalent grades rather than months. We calculate a student's total point score across all level 1-3 qualifications (summing their grades), but cap this at the best combination equivalent to three A levels in size. For further details, see Tuckett et al., 2021.