

Future Frontiers Exploratory Administrative Data Research

9th August 2023

Introduction

Future Frontiers' strategy for 2021-2026 sets out our plan to design, develop and rigorously evaluate an enhanced two-year programme that achieves meaningful long-term impact at the post-16 transition, transforming the life chances of disadvantaged young people.

Future Frontiers worked with [Mime Consulting](#) to access historic administrative data from the Department for Education's National Pupil Database, aiming to:

- Explore the post-16 trajectories of young people who share the characteristics of those we work with to inform our programme design and development, and
- explore the potential for new evaluations of the impact of our programme on young people's post-16 trajectories.

Research

While published DfE data includes the aggregate outcomes for various pupil groups across a range of post-16 outcomes, this research gives us the chance to follow much more specific groups of pupils through different year groups, tracking outcomes over time. The key advantages are:

Longitudinal tracking

The matched data allows us to track the same pupils, from Year 11 through their post-16 education, including outcomes at age 16, 17, 18 and 19. This provides a much clearer view of how particular groups of pupils progress through qualification levels over time than would be possible from public data.

Deeper contextual analysis

We are able to look at outcomes by multiple characteristic groups simultaneously. This allows a deeper understanding of the average outcomes of more specific pupil groups, for example; male, Ever 6 FSM (pupils eligible for free school meals in the last 6 years), Black Caribbean pupils with low Key Stage 4 attainment. A key part of this contextual analysis, which would not have been possible using published data, is that we are able to split the outcomes by prior attainment groups.

Pupils in this dataset

- Two cohorts of KS4 pupils who attended non-selective schools in London
- Pupils who finished Key Stage 4 in London in 2016 and 2017
- ~70,000 pupils per cohort
- Excluding pupils with an Education, Health and Care Plan (EHCP)
- Pupils are grouped into boundaries with similar grades; An attainment 8 score of 1-2 means a score of 1 or more but less than 2 (i.e. up to 1.99).

Limitations with this data

We acknowledge some limitations with this data when using it to make comparisons to more recent cohorts:

- More recent cohorts experienced disruption by the Covid-19 pandemic while in KS4 and KS5 (including reduced time in school, and higher results as a result of teacher / centre assessed grades)
- Future cohorts may be entering a different post-16 landscape
- Historic data indicates year-on-year variance in pupils completing qualifications.

Next Steps

In line with our strategy, this data will be used to better understand the post-16 trajectories of young people with similar characteristics to those we work with to inform our programme design and development. It will also be used to explore the potential for new evaluations of the impact of our programme on young people's post-16 trajectories, through the use of a control group which was created using this data.

The synthetic control method was used to create this control group. This is a statistical method used to evaluate the effect of an intervention in comparative case studies. A synthetic control group was created by weighting data from groups of pupils collected in this research. The final control group replicates the characteristics of the 2022/23 Future Frontiers cohort (Pilot cohort) on measurable dimensions for which we have data. For example, if 25% of the cohort are FSM eligible, male, Asian pupils, then 25% of the synthetic control group will also be FSM eligible, male, Asian pupils. This allows us to compare the pathways and outcomes of the Future Frontiers cohort against this control group, while noting the limitations of this comparison above.

Detailed outcomes of the synthetic control group are available in the 'Weighted Cohort' tab of the final dataset: [FF Cohort Output v0.622 20230621 Cleared.xlsx](#).

For any questions please get in touch with us at info@futurefrontiers.org.uk.

Pupil outcomes

Data is presented for the outcomes of:

- All pupils in the cohort
- Pupils who have characteristics similar to Future Frontiers' eligibility criteria (in a London, non-selective school, eligible for free school meals in the last 6 years, Attainment 8 score between 3-5)
- Pupils who have not been eligible for free school meals in the last 6 years, but meet all other eligibility criteria (to identify the disadvantage gap within this grade boundary).

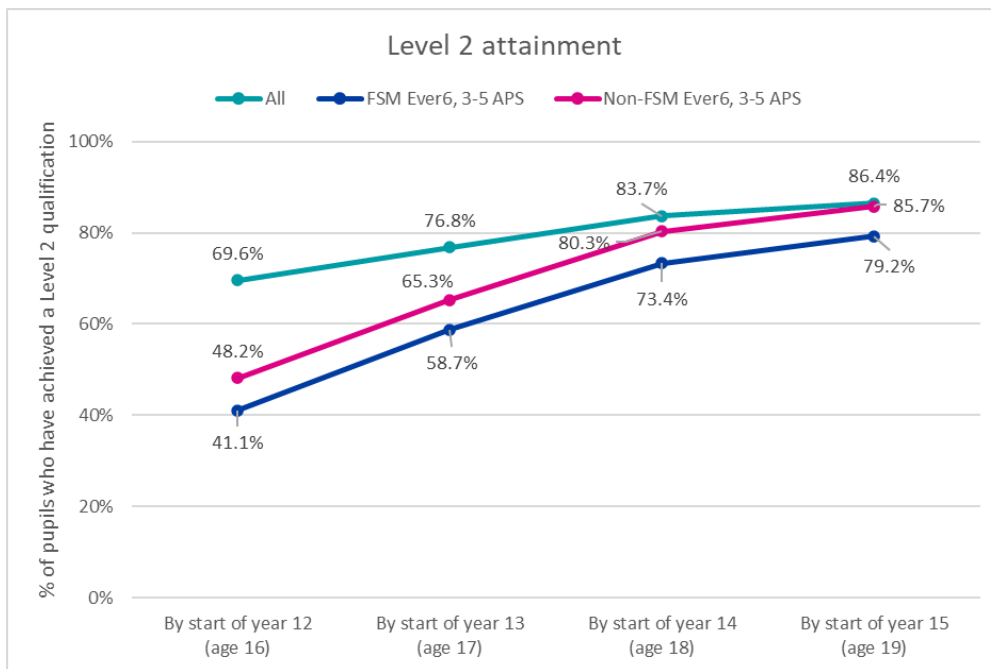
Level 2¹ Attainment is lower for FSM students

The graph shows the percentage of pupils who achieved a Level 2 qualification between the ages of 16 and 19. Overall, pupils eligible for FSM were 6.5 percentage points less likely to achieve a Level 2 qualification by age 19.

Specifically, by age 17, 58.7% of pupils in London who were eligible for FSM with GCSE Attainment 8 between 3-5 achieved a Level 2 qualification. This is in comparison to 65.3%

¹ This measure considers all pupils who were qualified to level 2, meaning all those who achieved a *full* Level 2 (5 GCSE 4/C or above).

of pupils with the same grades who were not eligible for FSM. The disadvantage gap does not vary significantly between the ages of 16 and 19.



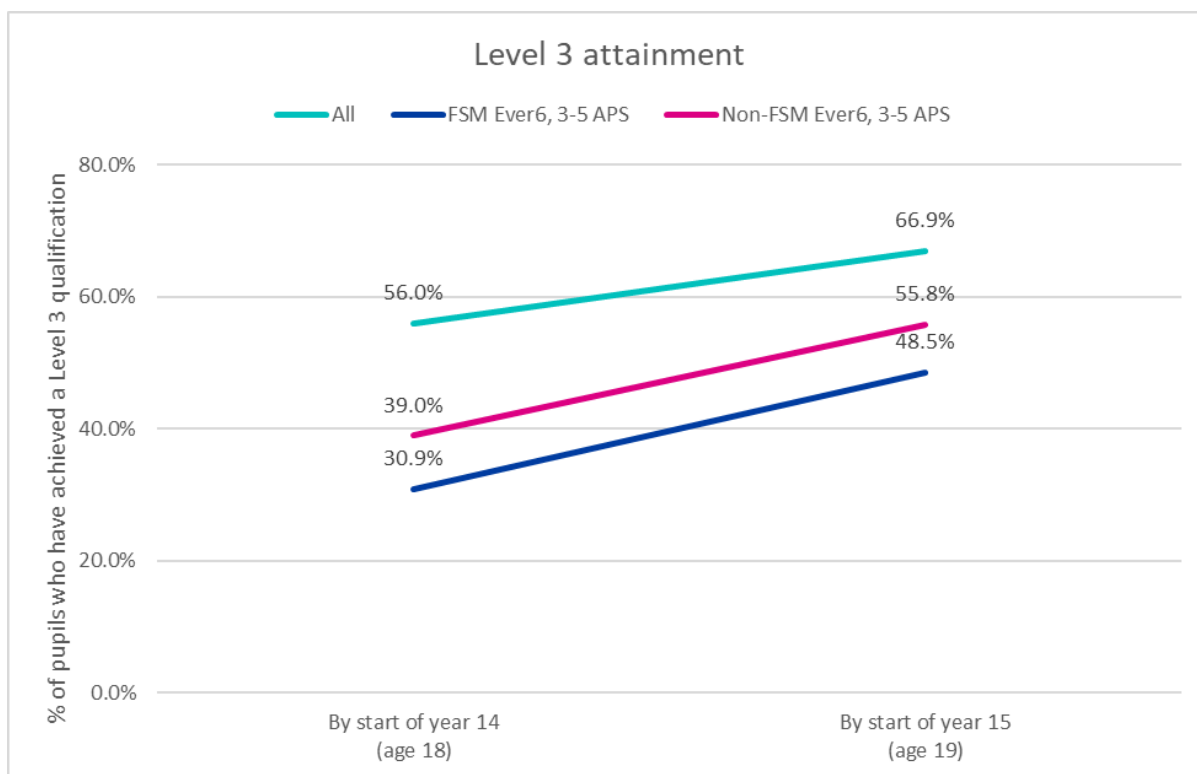
Level 3² Attainment is lower for FSM pupils

Similarly to the trends seen at Level 2, pupils eligible for FSM are less likely to achieve a Level 3 qualification compared to non-FSM peers.

The graph below shows the percentage of pupils who have achieved a Level 3 qualification between the ages of 18 and 19. By age 18, 30.9% of pupils in London who were eligible for FSM with GCSE Attainment 8 between 3-5 achieved a Level 3 qualification. This is in comparison to 39% of pupils with the same grades who were not eligible for FSM.

The disadvantage gap reduces slightly by age 19, when 48.5% of pupils in London who were eligible for FSM with GCSE Attainment 8 between 3-5 achieved a Level 3 qualification. 55.8% of pupils who were not eligible for FSM in London with the same grades achieved this.

² This measure considers all pupils who were qualified to level 3, meaning all those who achieved a full Level 3 (2 A Level passes or above).

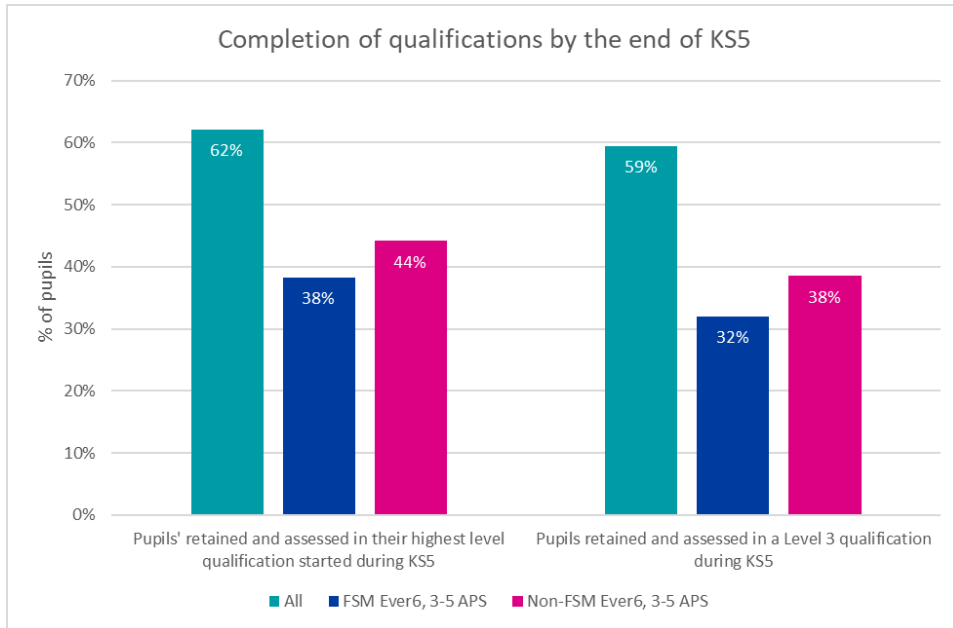


Completion of qualifications by the end of KS5 is lower for FSM pupils

A measure of qualification completion was identified in the datasets. This ‘Retained and Assessed’ measure is effectively a measure of whether a pupil remains enrolled in, and completes assessments (exams or coursework) in, the highest-level qualification they are enrolled in during KS5*. This gives us an indication of the proportion of pupils who have sustained education in their chosen qualification.

The analysis shows that only 38% of pupils in London who were eligible for FSM with GCSE Attainment 8 score between 3-5 were retained and assessed in the highest level qualification that they were enrolled in during KS5. This is in comparison to 44% of their non-FSM eligible peers. When looking at pupils retained and assessed in a Level 3 qualification, fewer pupils met this outcome overall and the disadvantage gap remained constant.

**This is a simplification of a more complex calculation done by the DfE. More details can be found here: [16 to 18 accountability measures: technical guidance - GOV.UK](#)*



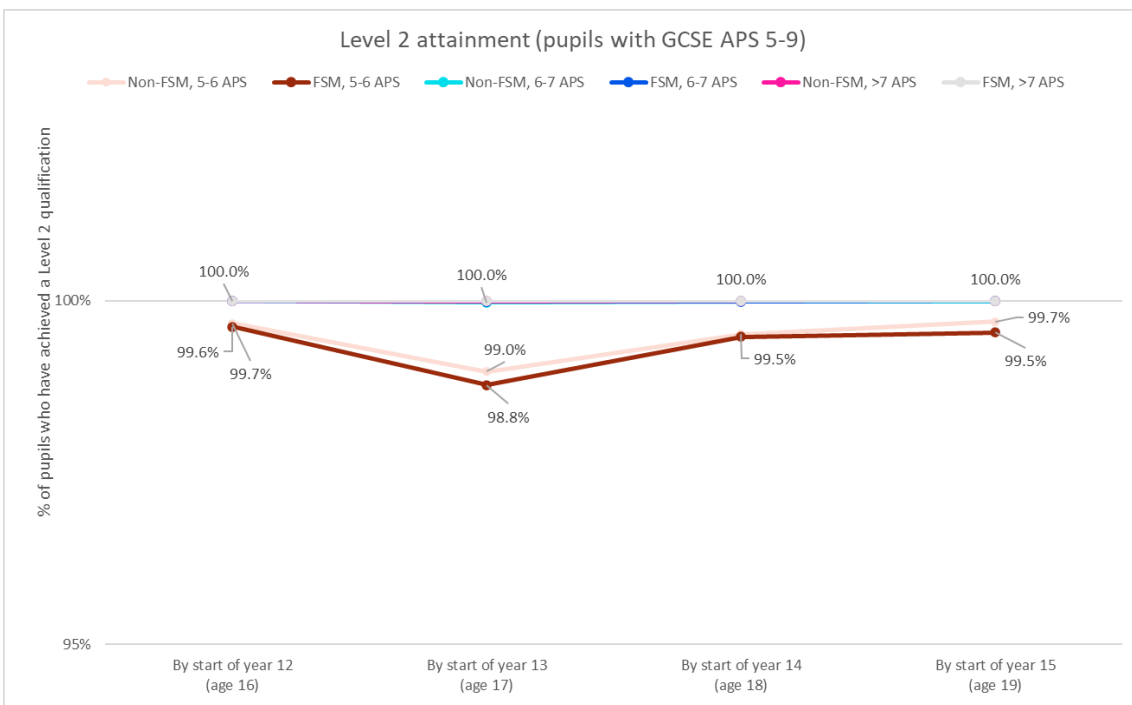
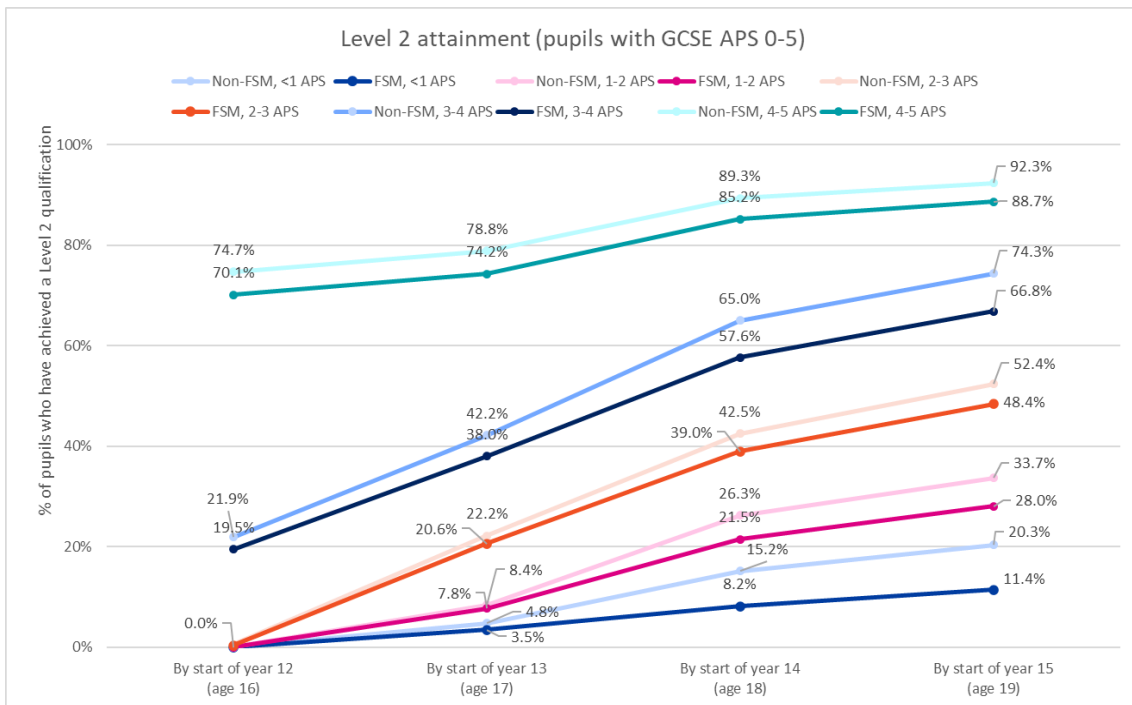
Attainment outcomes for pupils by fine GCSE grade boundary

Level 2 Attainment by fine GCSE grade boundary is lower for FSM pupils across all prior attainment bands

The graphs below show the percentage of pupils who achieved a Level 2 qualification between the ages of 16 and 19. Data is split by pupils eligible for FSM and very fine GCSE attainment 8 scores.

For the lower attaining group (pupils with GCSE APS 0-6), FSM eligible students achieved level 2 by age 18 at lower rates than the non-FSM eligible cohorts. For example, among those with an average Attainment 8 score of 3 or more and below 4, 65.0% of the non-FSM eligible cohort achieved level 2 by 18, while this rate was only 57.6% among the FSM eligible students.

Almost all pupils who achieved a GCSE Attainment 8 score of more than 5 had already achieved a Level 2 qualification equivalent by age 16.



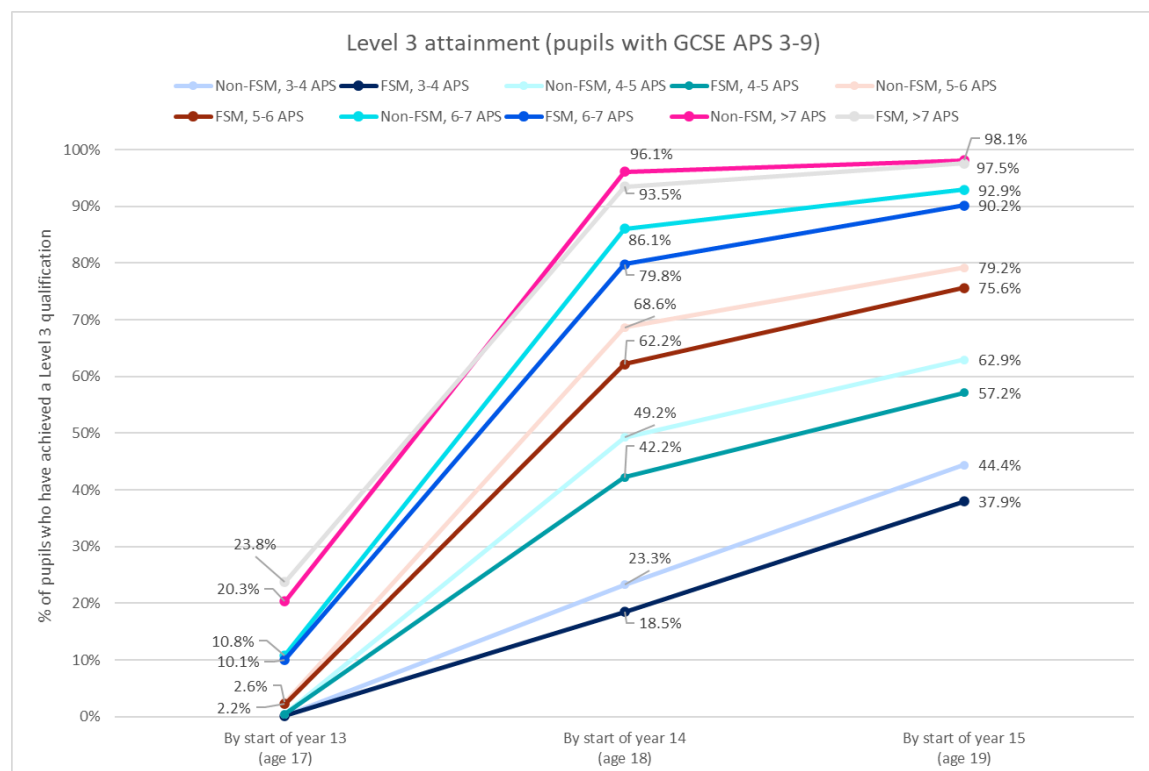
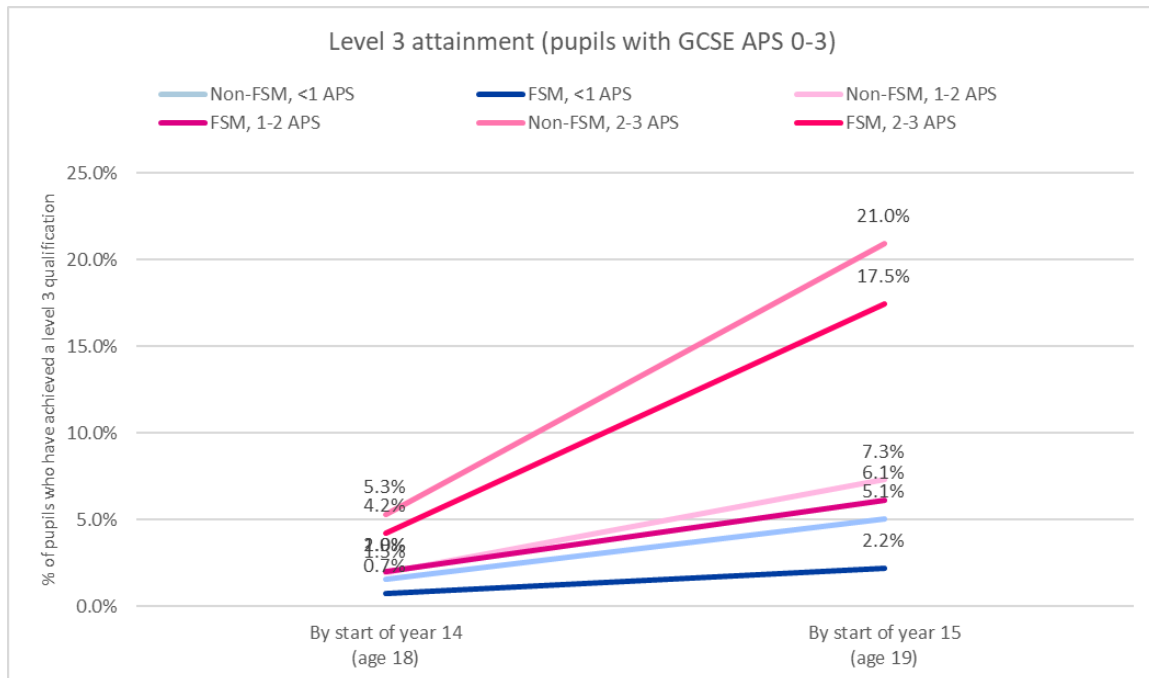
Level 3 Attainment by fine GCSE grade boundary is lower for FSM students across all prior attainment bands

These graphs show the percentage of pupils who achieved a Level 3 qualification between the ages of 16 and 19. Data is split by pupils eligible for FSM and very fine GCSE attainment 8 scores.

Across all fine prior attainment bands, FSM eligible students achieved level 3 by age 19 at lower rates than the non-FSM eligible cohorts. For example, among those with an average

prior attainment score between 4 and 5, 62.9% of the non-FSM eligible cohort achieved level 3 by 19, while this rate was only 57.2% among the FSM eligible students.

As pupils' prior attainment increases, the disadvantage gap in Level 3 attainment tends to reduce. This indicates that pupils eligible for FSM with low Attainment 8 scores are disproportionately not achieving Level 3 qualifications compared to those with higher Attainment 8 scores. This trend is not as significant when looking at Level 2 attainment.



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The analysis was carried out in the Secure Research Service, part of the Office for National Statistics.