

'The Forgotten Third'

A rapid review of the evidence

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Introduction

Each year, pupils, families, school staff and the press await with apprehension the publication of GCSEs results. Achieving a grade C in English and math has been recognised as an important output of the education system and as a key requirement for employment.ⁱ Since 2015, it is also mandatory for students to resit the exams if they fail to get a pass grade and wish to continue in some form of publicly funded education. In fact, failing to pass the GCSE English test has been shown to have detrimental effects in both the short and the long term by increasing the probability of young people dropping out of education by age 18, of being neither in education nor in training or employment (NEET), and of facing narrower opportunities in terms of courses and institutions they can attend.¹

This year's GCSE results tell us that 36 per cent of sixteen-year olds failed to secure a standard pass (grade 4) in each of English and maths.² This means that, after 12 years of compulsory education, just over one third of young people obtain a qualification that might not be recognised as educationally and socially worthwhile.

Who are these students, often called 'The Forgotten Third'? What can we expect from their long-term outcomes? What are the broader determinants of their low GCSE grades? We have looked at a number of studies and found that some of the key factors associated with low GCSE attainment include:

- Socio-economic disadvantage, for example if the pupil is eligible for free school meals (FSM);
- Learning disabilities;
- Gender, where boys are less likely to achieve good GCSEs scores;
- Ethnicity, where White boys and Black pupils are less likely to achieve good GCSEs scores;
- Family background, such as parents education levels and median family income;
- Poor literacy results in primary school, which often cumulates into low KS2 and KS4 scores;
- School quality and truancy rates.

Below we provide a summary of the most relevant literature.

Who are 'The Forgotten Third'? Characteristics

The Department for Education data on Key Stage 4 results in 2018 provides the latest statistics on pupils who obtained grades 4 or above in English and math at age 16, and their characteristics.³

The proportion of pupils achieving a grade 4 or above in English and maths was 64.2 per cent for all schools and 65.5 per cent for state-funded schools. Below, we summarise the figures for pupils who did not achieve grades 4 or above in English and math, by pupils' characteristics:

- **Disadvantaged pupils:**ⁱⁱ 60 per cent of pupils receiving Free School Meals (FSM) v 28.5 per cent of all other pupils (a difference of 27.7 percentage points).

ⁱ In 2017, the GCSE grading system changed from the A*-G scale to a 9 to 1 scale, where the standard pass grade (C) in the former structure corresponds to a grade 4 in the new one. English language, English literature and maths were the first to be graded from 9 to 1 in 2017.

ⁱⁱ Pupils are defined as disadvantaged if they are known to have been eligible for free school meals in the past six years (from year 6 to year 11), if they are recorded as having been looked after for at least one day or if they are recorded as having been adopted from care.

- **English as first language:** 37 per cent of pupils with a language other than English as first language (EAL) v 35.4 per cent of pupils with English as first language. However, we need to keep in mind that the group of pupils with English as additional language is very heterogeneous. Average statistics usually mask wide variations depending on the home language, the pupil age when they entered the English education system, and other family, community and life circumstances that had an impact on the student's learning trajectory. In addition, in the case of EAL pupils it is important to question whether attainment scores actually measure the whole of their subject knowledge or only what they can communicate effectively in English.⁴
- **SEN:** 74.2 per cent of all SEN pupils v 29.4 per cent of pupils not identified with SEN (a 44.8 percentage point gap).
- **Ethnicity:** 36.1 per cent of White pupils, 36 per cent of mixed ethnicity pupils, 30.5 per cent of Asian pupils, 40.2 per cent of Black pupils, and 12.7 per cent of Chinese pupils.
- **Gender:** 39.5 per cent of boys v 31.9 per cent of girls (a 7.6 percentage points gap).

Studies using longitudinal data lead to similar conclusions, while allowing the identification of a wider set of factors impacting attainment.

A key dataset is the Longitudinal Study of Young People in England (LSYPE) data, a panel study of over 15,000 young people and their families, interviewed annually since 2004. LSYPE collects a very broad range of information, including details about parental background as well as the attitudes, behaviours and aspirations of the young person and their parent. This data can be matched to the National Pupil Database (NPD), which contains pupil and school characteristics, such as ethnicity, information about SEN identification and school level prior attainment. The two datasets linked together allow comparisons of the relative importance of different factors for GCSE attainment outcomes. For example, it is possible to understand the importance of levels of parental education compared to gender, of family composition compared to the neighbourhood that a pupil lives in and of household income to the pupil's age within their school year.

For example, a report published in 2010 by the Department for Children, Schools and Families found that for pupils that get very few or no qualifications at the end of KS4, strong predictors of progress and attainment were: whether the pupil was identified as having SEN; parental qualification levels; median household income; family composition and parental employment status; suspension and exclusion rates.⁵

Expanding the analysis to include the broad range of variables available through the LSYPE, the study was able to pinpoint other elements that are correlated with pupil characteristics and therefore could affect GCSE attainment and progress. These include:

- Household income and material deprivation;
- Area deprivation;
- Family composition;
- Parental employment status;
- Pupil aspirations;
- Parental engagement;
- Parental background (social class and education levels);
- School composition; and
- School effectiveness.⁶

A follow up study produced a similar analysis for the cohort of young people in England who completed year 11 in 2015, prior to the introduction of the new GCSE grading system.⁷

This report looked at the link between young people's KS4 attainment and progress, and their personal characteristics, family background, attitudes and behaviours, health and wellbeing, and school area. The study identified the following as the underlying factors predicting attainment at KS4:

Disadvantage

- Living with neither biological parent;
- Living in rented accommodation;
- Living in a household with below median income;
- Having a mother without Higher Education or degree level qualifications;
- Absence of internet-connected home desktops or laptops;
- Living in more disadvantaged areas.

Health and wellbeing

- Being psychologically distressed: young people reporting particularly low levels of psychological distress or particularly high levels of psychological distress had lower attainment than those with moderate levels of psychological distress,ⁱⁱⁱ
- Being victim of cyber-bullying;
- Having challenging parental relationships;
- Sleeping for nine and a half hours or more per night (that is, more than the optimal amount of sleep).

Approach to school

- Truancy for several days at a time (or longer) corresponded to markedly lower attainment;
- Homework completion: students who usually do all of their homework had higher attainment than those who usually do most of their homework and, particularly, those who only do some or none of it.

Gender

As in other studies, the attainment of boys was lower than that of girls in absolute terms, but once other elements were considered this difference was no longer significant. Related factors included learning difficulties and the quality of the home environment, for example:

- The higher incidence of Special Educational Needs (SEN) and disabilities which affect schooling among boys;
- The fact that parents were more likely to expect their daughters to go on to university and were less likely to want their daughters to pursue paths outside education after year 11 (e.g. apprenticeships).

Ethnicity

After controlling for all the other modelled factors, the attainment of young people from Black African and Black Caribbean backgrounds was slightly lower than that of other groups.⁸

ⁱⁱⁱ This is in line with the general idea that a moderate level of stress is not negative but can actually benefit performance.

Different categorisations of low attainment

Several, more dated, studies looked into the topic of low attainers, albeit with slightly different definition of the term. The report 'Statistics of Education: The Characteristics of Low Attaining Pupils' comments that 'there is no definition of low attainment that is generally used: different definitions are applicable for different purposes. The intention (...) is to highlight the characteristics of low attainers using definitions that are useful for this purpose. However, other definitions are possible and many of these would be equally valid.'⁹ For the purpose of this section, we focused our attention on two studies that showed that the characteristics of low attainers are very similar, no matter the precise definition of attainment.

Cassen and Kingdon discussed low educational achievement in terms of four different measures: students who receive no passes at all in their GCSE/GNVQ exams at Key Stage 4; those who obtain no grade higher than 'D' in any exam; those who do not achieve a pass in at least one of English or mathematics; and those not achieving at least five passes at any grade including English and maths. The study found the characteristics of low attainers to be very similar to those highlighted in other studies. They were more likely to be White British boys, to be eligible for free school meals, and to be identified as having special educational needs.¹⁰

The Effective Pre-School, Primary & Secondary Education Project (EPPSE study) took a longitudinal view of a sample of children from age 3 to 16 and investigated the factors influencing achievement as obtaining 5 A*-C including English & maths and found that parents' highest qualification level was the strongest net predictor of low GCSE results. Other important predictors were: living in a disadvantaged neighbourhood (in terms of the proportion of children in families on a low income), as well as living in a neighbourhood perceived as unsafe. In addition, the percentage of White British residents in a neighbourhood was found as a negative predictor of students' progress in English while living in a neighbourhood with higher crime rates predicted poorer progress in maths. Finally, this study looked at the progress between KS2 and KS4 and found that student background characteristics were also strong predictors. Students with the following characteristics made greater progress between KS2 and KS4: those older for their year group (Autumn versus Summer-born), girls, pupils from families with highly qualified parents, higher socio-economic status (SES) groups, higher income families, and those not eligible for FSM.¹¹

Outcomes of 'The Forgotten Third'

Taking a life-long perspective of the repercussions of 'low attainment', Cassen and Kingdon concluded that those students with no passes at all or no pass better than a D are likely to be badly placed in the job market, and at risk of unemployment or even of falling into low-level criminal activity.¹²

Rigorous studies of the long-term impact of failing GCSE exams in English and maths are scant. Therefore, we first look at the statistics published by the Department for Education, in particular those related to Level 2 and 3 attainment by young people aged 19. The latest available data relates to young people aged 19 between 2016 and 2017 in the state sector and their progression rate, i.e. the proportion of young people who failed to achieve a GCSE, or another Level 2, qualification in English and maths at age 16 but who had achieved this by age 19. The data shows that the

progression rate in English and maths for GCSE only increased from 14.0 per cent to 17.6 per cent. Disaggregating by subject, the main findings are the following:

English: In 2017, 80.4 per cent of young people had achieved Level 2 English by age 19, up 1.1 percentage points from 2016, an increase driven by the rise in the proportion gaining Level 2 English via GCSEs (+3.2 percentage points). The GCSE progression rate also increased from 17.1 per cent in 2016 to 21.2 per cent.

Maths: In 2017, 75.9 per cent of young people achieved Level 2 by age 19, a fall of 0.7 percentage points compared to 2016. The proportion gaining Level 2 via GCSEs (73.4 per cent) did not change, but there was a 4.5 percentage point increase in the GCSE progression rate.¹³

One recent study looked specifically at the impact of just failing the GCSE English test on long term outcomes by using administrative data covering a recent GCSE cohort and following them for three years after the exam. The authors were able to show that students have significantly different educational trajectories depending on whether they just pass or fail the exam. Three years later, students who just failed to achieve a grade C in English were more likely to drop out of education by age 18, without some form of employment (and become classified as 'not in education, training or employment' - NEET). They had a lower probability of entering an upper-secondary high-level academic or vocational track and of starting tertiary education. For example, narrowly missing a grade C in English increased the probability of dropping out of education at age 18 by four per cent and becoming NEET by two per cent. Marginally achieving a grade C also increased the probability of starting a higher-level academic or vocational level qualification by between six and nine percentage points.¹⁴

The authors conclude that 'just failing to obtain a grade C narrows the range of opportunities open to students immediately afterwards in terms of the courses, institutions and quality of institutions they can attend. We show that many marginal students do not recover from this'.¹⁵ If other educational options are not available to people who cannot immediately enter higher academic/vocational education, this can become an important source of inequality in education.

Other considerations and implications

The studies we reviewed made other important points to keep in mind when trying to tackle low attainment, such as:

- Some pupils are low attaining in one subject but not others.
- Low attainers at KS2 are likely to have been low attaining at the previous Key Stage.¹⁶

These points and the studies summarised above lead to the following implications:

- Learning and academic achievement is a long-term journey with many determinants.
- There is a multitude of factors at different stages of a student's life that converge to have an impact on KS2 and KS4 results, suggesting the need to intervene early and broadly.¹⁷
- Focusing on fixing a long-term problem with very targeted action too late in the educational journey of a pupil is likely to have limited impact.
- Early years education, parenting help, income support, and improvements to the home learning environment have major parts to play.

- Poor literacy results in primary school are a strong risk factor for later low achievement and have little to do statistically with not speaking English at home.
- Not all cases of low achievement are the same. While much of low achievement is due to social and economic disadvantage and to poor early results in literacy, Cassen and Kingdon showed that many children make a satisfactory start in primary school and fall behind later.¹⁸ It is important to understand the different mechanisms behind these scenarios.

¹ Stephen Machin, Sandra McNally, and Jenifer Ruiz-Valenzuela, 'Entry Through the Narrow Door: The Costs of Just Failing High Stakes Exams', *Centre for Vocational Educational Research London School of Economics & Political Science*, CVER Discussion Paper Series, Research Discussion Paper 014, no. ISSN 2398-7553 (April 2018), <http://cver.lse.ac.uk/publications/abstract.asp?index=5836>.

² Department for Education, 'Key Stage 4 and Multi-Academy Trust Performance 2018 (Revised)', GOV.UK, 24 January 2019, <https://www.gov.uk/government/statistics/key-stage-4-and-multi-academy-trust-performance-2018-revised>.

³ Department for Education.

⁴ Jo Hutchinson, 'Educational Outcomes of Children with English as an Additional Language', Education Policy Institute, February 2018, <https://epi.org.uk/publications-and-research/educational-outcomes-children-english-additional-language/>.

⁵ Department for Children, Schools and Families, 'Identifying Components of Attainment Gaps' (London, March 2010), 23, <https://dera.ioe.ac.uk/822/1/DCSF-RR217Fin.pdf>.

⁶ Department for Children, Schools and Families, 'Identifying Components of Attainment Gaps'.

⁷ Carli Lessof et al., 'Understanding KS4 Attainment and Progress: Evidence from LSYPE2' (London: Department for Education, October 2018), 26, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/748514/Understanding_KS4_LSYPE2_research-report.pdf.

⁸ Lessof et al., 'Understanding KS4 Attainment and Progress: Evidence from LSYPE2'.

⁹ Department for Education and Skills, 'Statistics of Education: The Characteristics of Low Attaining Pupils' (London: Department for Education and Skills, June 2005), 4, <https://webarchive.nationalarchives.gov.uk/tna/20130320004840/http://media.education.gov.uk/assets/files/pdf/b022005pdf.pdf>.

¹⁰ Robert Cassen and Geeta Kingdon, 'Tackling Low Educational Achievement' (York: Joseph Rowntree Foundation, 2007), <https://www.jrf.org.uk/report/tackling-low-educational-achievement>.

¹¹ Pam Sammons et al., 'Influences on Students' GCSE Attainment and Progress at Age 16. Effective Pre-School, Primary & Secondary Education Project (EPPSE)', Research brief (London: Department for Education, September 2014), https://www.ucl.ac.uk/ioe/sites/ioe/files/RB352_-_Influences_on_Students_GCSE_Attainment_and_Progress_at_Age_16_Brief.pdf.

¹² Cassen and Kingdon, 'Tackling Low Educational Achievement'.

¹³ Department for Education, 'Level 2 and 3 Attainment by Young People Aged 19 in 2017', GOV.UK, accessed 19 February 2019, <https://www.gov.uk/government/statistics/level-2-and-3-attainment-by-young-people-aged-19-in-2017>.

¹⁴ Machin, McNally, and Ruiz-Valenzuela, 'Entry Through the Narrow Door: The Costs of Just Failing High Stakes Exams'.

¹⁵ Machin, McNally, and Ruiz-Valenzuela, 29.

¹⁶ Department for Education and Skills, 'Statistics of Education', 5.

¹⁷ Sammons et al., 'Influences on Students' GCSE Attainment and Progress at Age 16. Effective Pre-School, Primary & Secondary Education Project (EPPSE)'.

¹⁸ Cassen and Kingdon, 'Tackling Low Educational Achievement'.