

Educational inequalities

Christine Farquharson

Sandra McNally Imran Tahir

An IFS initiative funded by the Nuffield Foundation







The IFS Deaton Review

BTEC funding loss 'will deepen inequality', warns Rochdale MP

Workplace gains elusive for highly educated UK minorities

A new study finds that despite high levels of education, UK-born children of immigrant parents face lower levels of employment compared to their white counterparts.

Do GCSE results reveal growing inequality in education? Skip co

Skip college? Not if you want to make more money

Government education funding puts levelling-up into reverse, IFS claims

Maths A-Level can add up to £10k to an annual salary

Least selective universities 'performing best on social mobility'

Although Russell Group university tops new IFS/Sutton Trust ranking based on 'mobility rate', other selective institutions languish towards bottom of list

Black Caribbean girls in England 'twice as likely to be excluded from schools as white girls'

Covid could cost children £350bn in earnings due to lost learning, says IFS

Children's language skills deteriorated during Covid lockdown so much that now they struggle to communicate

What do we mean by educational inequalities?





Precision through prepositions

Inequalities 'by' and 'in' education – and beyond



"Educational inequalities" can mean many different things

 Inequalities by educational attainment – how do life outcomes differ by level of education?

Workplace gains elusive for highly educated UK minorities

A new study finds that despite high levels of education, UK-born children of immigrant parents face lower levels of employment compared to their white counterparts.

Skip college? Not if you want to make more money

Inequalities by education

Maths A-Level can add up to £10k to an annual salary

Least selective universities 'performing best on social mobility'

Although Russell Group university tops new IFS/Sutton Trust ranking based on 'mobility rate', other selective institutions languish towards bottom of list

Covid could cost children £350bn in earnings due to lost learning, says IFS

Precision through prepositions

Inequalities 'by' and 'in' education - and beyond



"Educational inequalities" can mean many different things

- Inequalities by educational attainment how do life outcomes differ by level of education?
- Inequalities in educational attainment how is educational attainment distributed?

BTEC funding loss 'will deepen inequality', warns Rochdale MP

Do GCSE results reveal growing inequality in education?

Government education funding puts levelling-up into reverse, IFS claims

Inequalities in education

Black Caribbean girls in England 'twice as likely to be excluded from schools as white girls'

Children's language skills deteriorated during Covid lockdown so much that now they struggle to communicate

This presentation

A huge topic... in about 20 minutes



Inequalities by education

1. Why should we worry about education inequalities?

Inequalities in education

- 2. When do educational inequalities develop?
- 3. Who fares poorly, and well, in the education system?
- 4. How equal is the education system?

But first... the fundamentals

A quick slide on data



Much of this presentation focuses on England

Broad issues in the rest of the UK are often (not always) similar

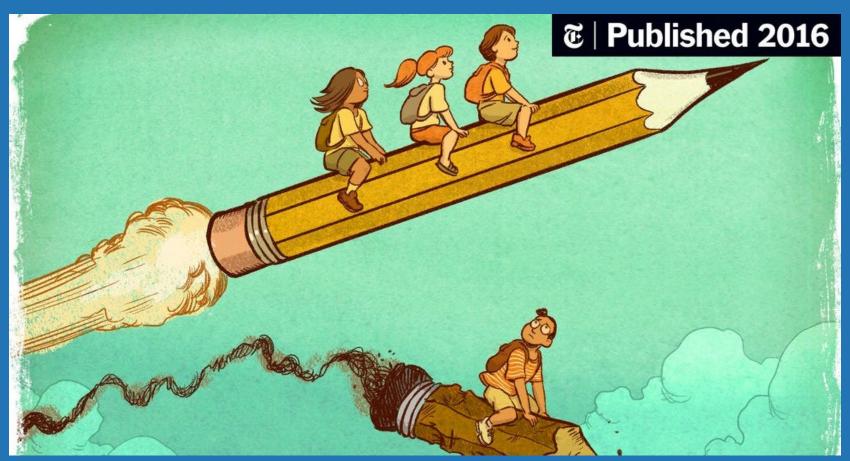
But systematically tracking inequalities in educational resources and outcomes relies on a strong commitment to data

- Attainment data: publicly available headline statistics, plus breakdowns by gender, income, ethnicity, geography, ...
- And the intersections between them
- And how children perform between stages of education
- And the resources the state provides

A serious commitment to tackling educational inequalities should start with a serious commitment to data

Inequalities in education: When do educational inequalities develop?

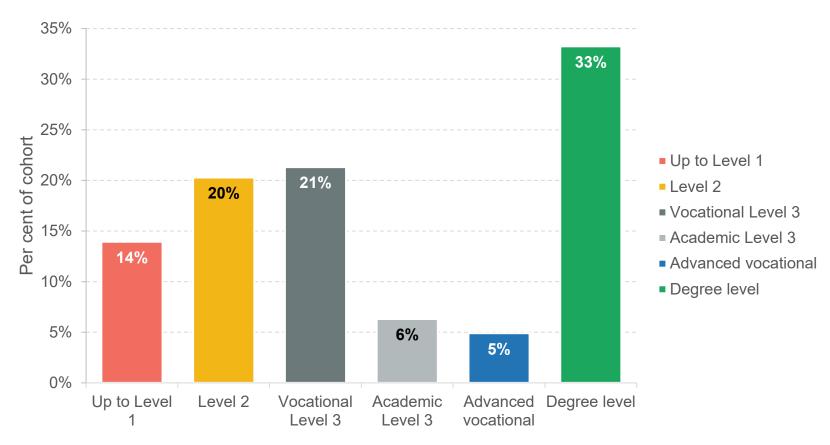




There are significant differences in how much education young people get



Highest qualification at age 26 (2016), England

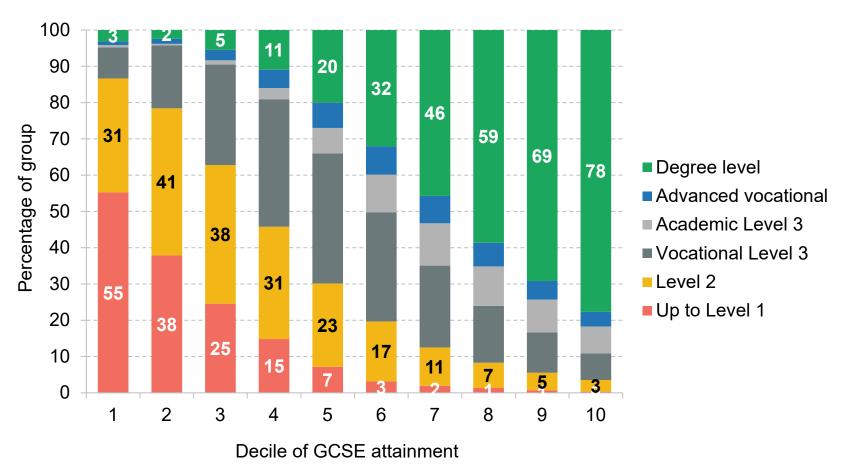


Source: Authors' calculations using Table A1.9 in Espinoza et al. (2020).

But those differences trace back to age 16...

Educational attainment at age 26, by GCSE attainment (2016), England



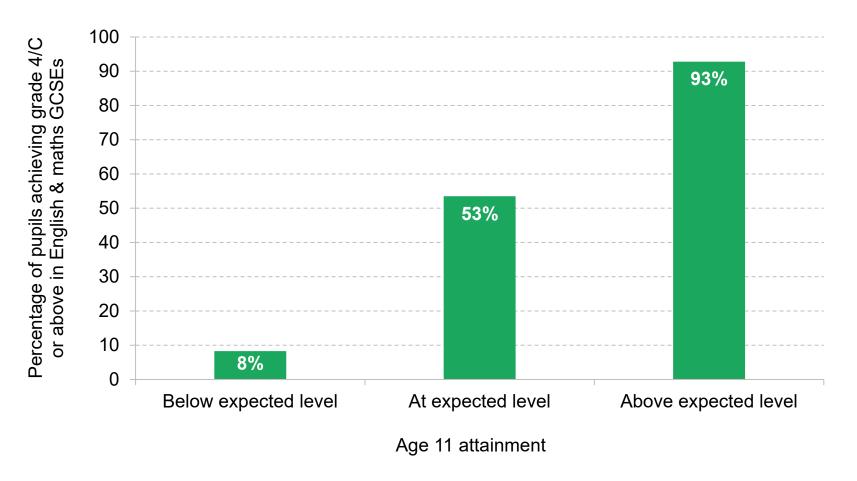


Source: Figure 59, Farquharson et al. (2022).

... which traces back to age 11...

Inequality The IFS Deaton Review

GCSE performance, by attainment at the end of primary school (2019), England

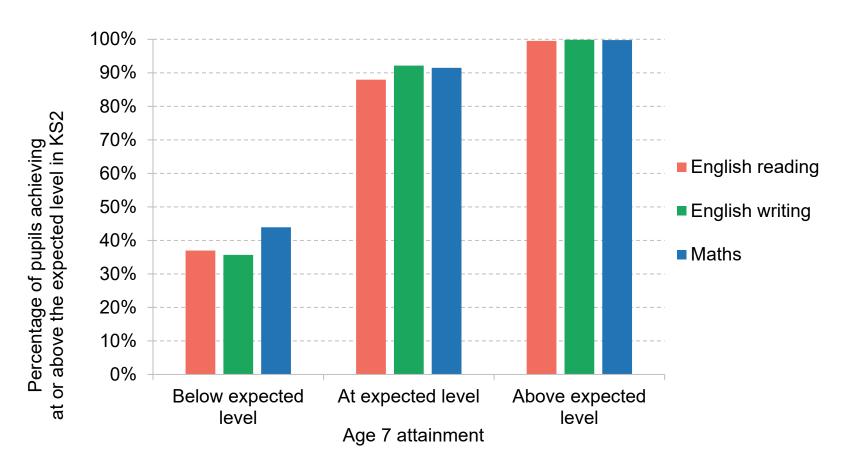


Source: Figure 50, Farquharson et al. (2022).

... which traces back to age 7...

Inequality The IFS Deaton Review

Attainment at the end of primary school, by level of attainment at age 7 (2019), England

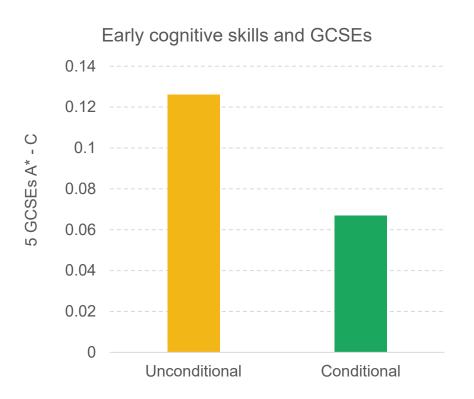


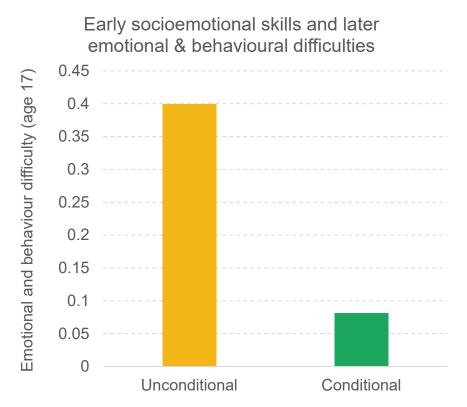
Source: Figure 49, Farquharson et al. (2022).

... which traces back to the pre-school years

Inequality The IFS Deaton Review

Associations between early development (age 3) and later outcomes, UK





Source: Table 2, Cattan et al. (2022).

Note: Conditional estimates control for characteristics of the child, family, environment and skills measures in adolescence

Inequalities in education: Who fares poorly, and well, in the education system?

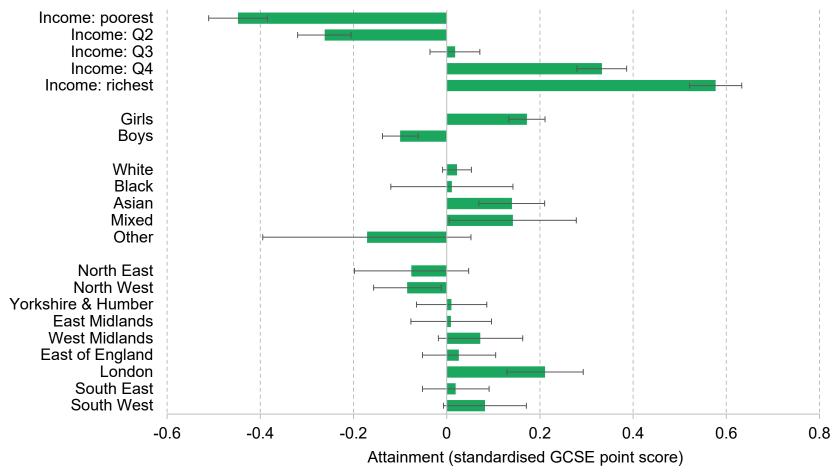




(How) are existing inequalities reflected in education?

Educational attainment at GCSEs, Millennium Cohort Study (UK)





Source: Figure 24, Farquharson et al. (2022).

What inequalities does the existing education system produce?

(How) are existing inequalities reflected in educational outcomes?

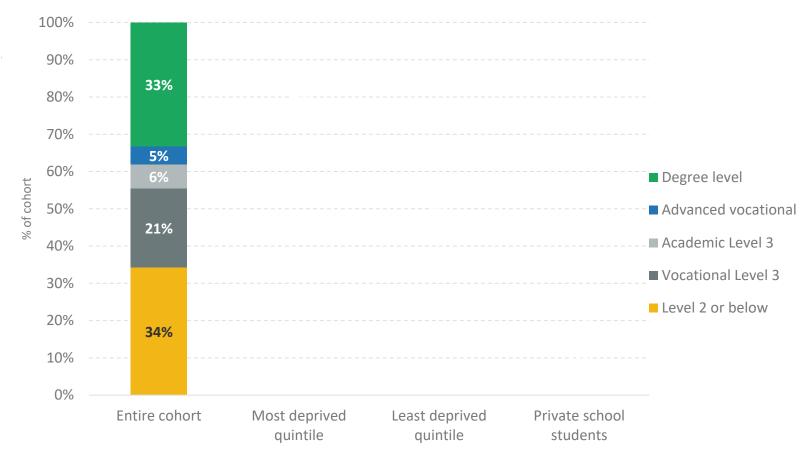


Enormous socio-economic gaps in educational attainment

There are sharp inequalities by socioeconomic status

Highest qualification at age 26 (2016), England



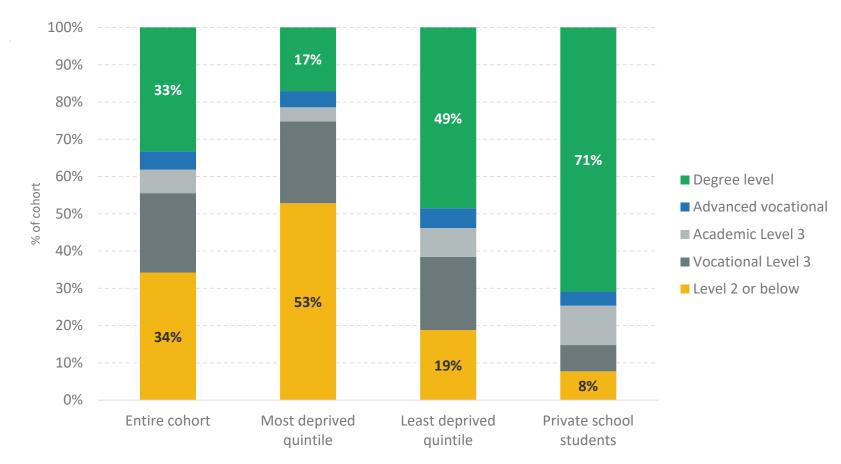


Source: Figure 33, Farquharson et al. (2022).

There are sharp inequalities by socioeconomic status



The distribution of educational attainment among 26-year-olds in England by socioeconomic status, 2016

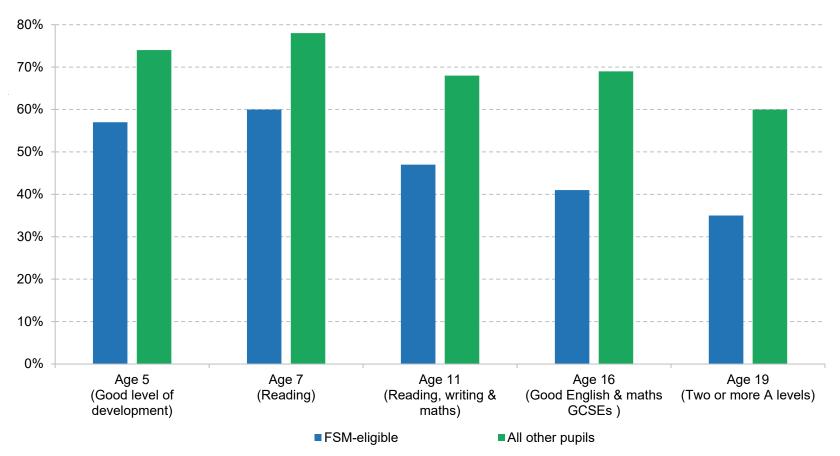


Source: Figure 33, Farquharson et al. (2022).

And these inequalities have their roots earlier in life



Attainment gaps between students eligible and not eligible for free school meals, 2019 (England)

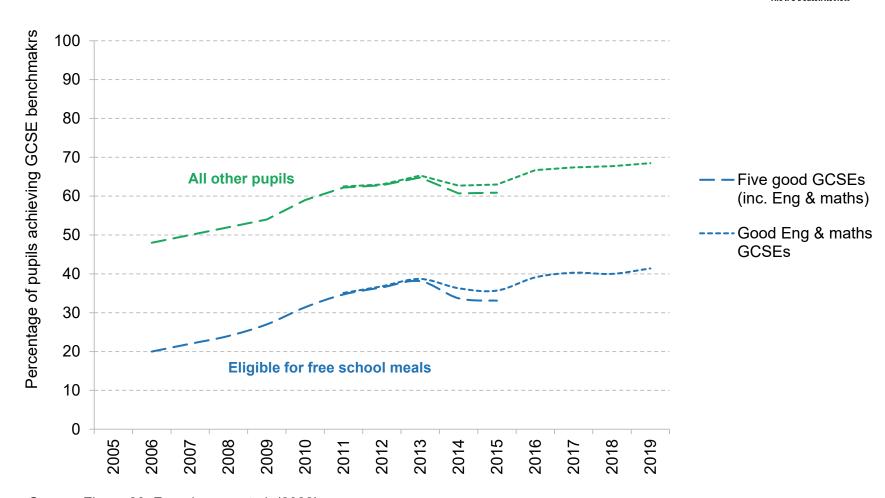


Source: Figure 27, Farquharson et al. (2022).

Disadvantage gaps are very stubborn

Inequality The IFS Deaton Review

GCSE performance by eligibility for free school meals (England)

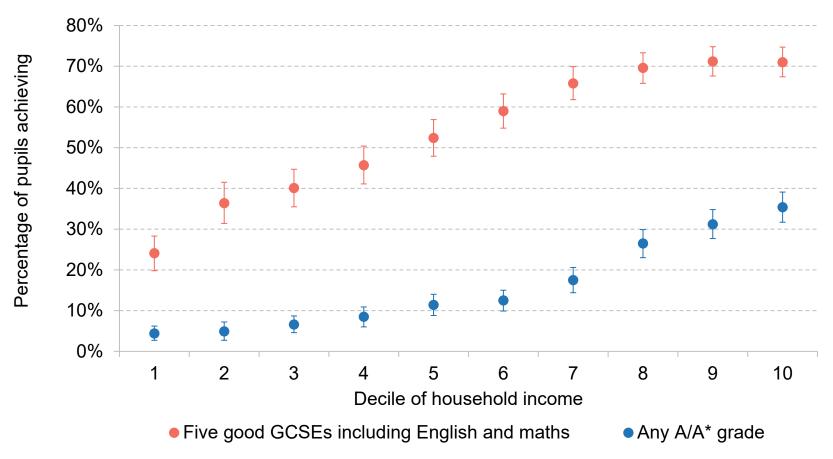


Source: Figure 28, Farquharson et al. (2022).

And the gaps are not just about the poorest vs. the rest

Inequality The IFS Deaton Review

GCSE attainment by decile of equivalised household income at age 14 (MCS cohort)



Source: Figure 29, Farquharson et al. (2022).

What inequalities does the existing education system produce?

(How) are existing inequalities reflected in educational outcomes?



Enormous socio-economic gaps in educational attainment

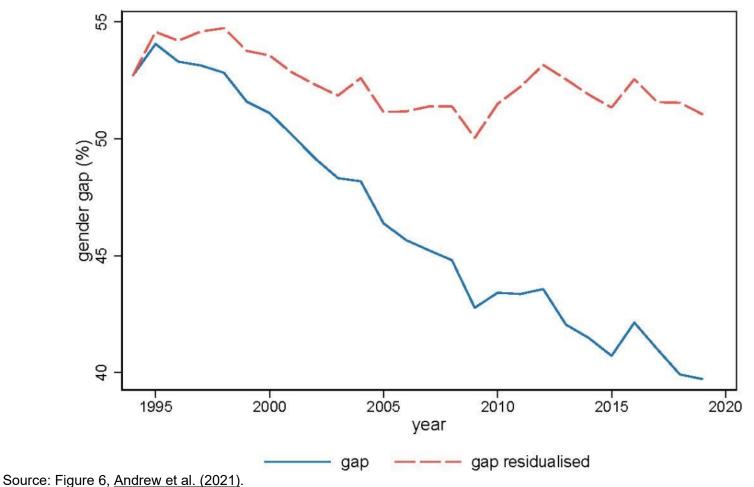
 Young people from disadvantaged families are far less likely to be successful in their GCSEs and to study for higher-level qualifications

Girls outperform boys at school – but miss out on the highest returns

Girls do better in education – but worse in the labour market



Gender gap in pre-tax earnings: With and without controlling for education



What inequalities does the existing education system produce?

(How) are existing inequalities reflected in educational outcomes?



Enormous socio-economic gaps in educational attainment

 Young people from disadvantaged families are far less likely to be successful in their GCSEs and to study for higher-level qualifications

Girls outperform boys at school – but miss out on the highest returns

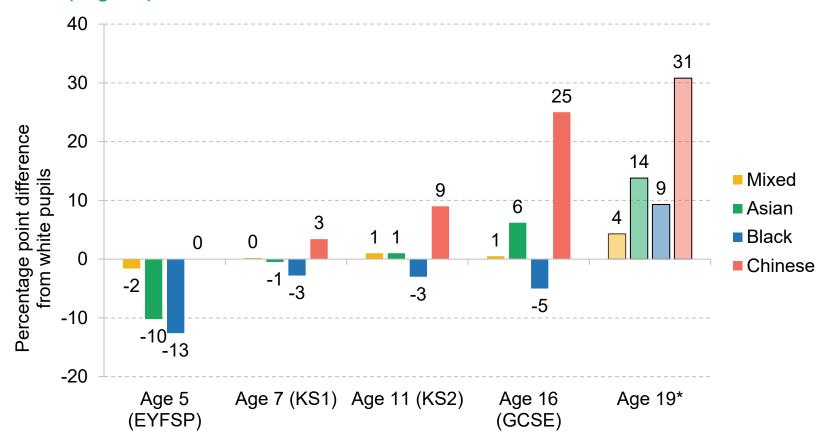
 Since the 1980s, girls have done better at school and more women now have degrees – but large earnings penalties still persist

Young people from non-white backgrounds start out behind, but make faster progress through the schooling system and beyond

Children from ethnic minorities start out behind, but make fast progress



Attainment gaps between ethnic minority pupils and white pupils, 2019 GCSE cohort* (England)

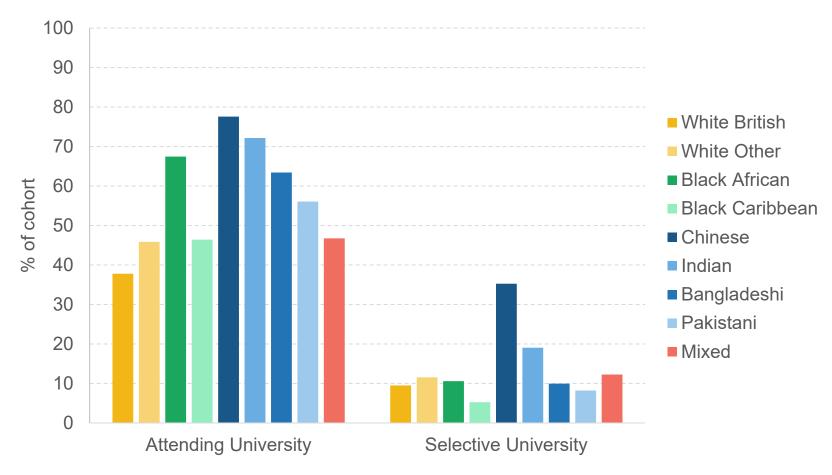


Source: Figure 37, Farquharson et al. (2022). Note that age 19 results are from a different cohort (the 2016 GCSE cohort).

Every ethnic minority group is more likely to progress to university than White British pupils

Inequality
The IFS Deaton Review

Progression to higher education at age 19 by ethnicity, 2018-19 (England)



Source: Adapted from Figure 39, Farquharson et al. (2022).

What inequalities does the existing education system produce?

(How) are existing inequalities reflected in educational outcomes?



Enormous socio-economic gaps in educational attainment

 Young people from disadvantaged families are far less likely to be successful in their GCSEs and to study for higher-level qualifications

Girls outperform boys at school – but miss out on the highest returns

 Since the 1980s, girls have done better at school and more women now have degrees – but large earnings penalties still persist

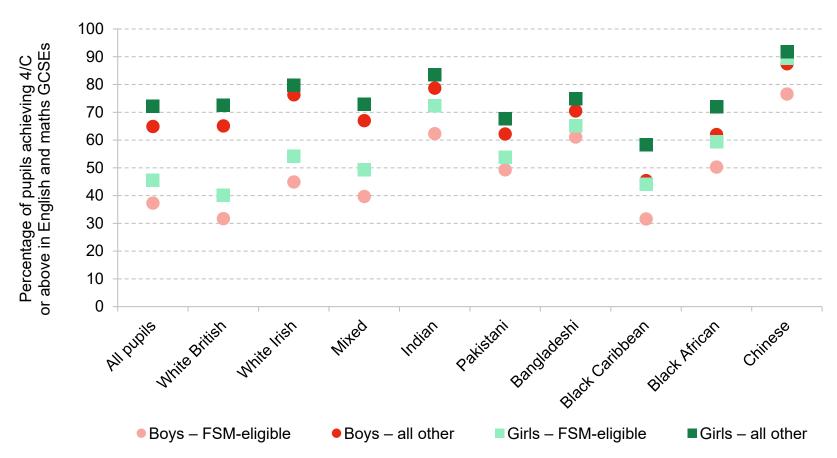
Young people from non-white backgrounds start out behind, but make faster progress through the schooling system and beyond

And these inequalities also intersect

Intersections between inequalities matter a lot

Inequality The IFS Deaton Review

GCSE performance by eligibility for free school meals, gender and ethnicity (2019 England)

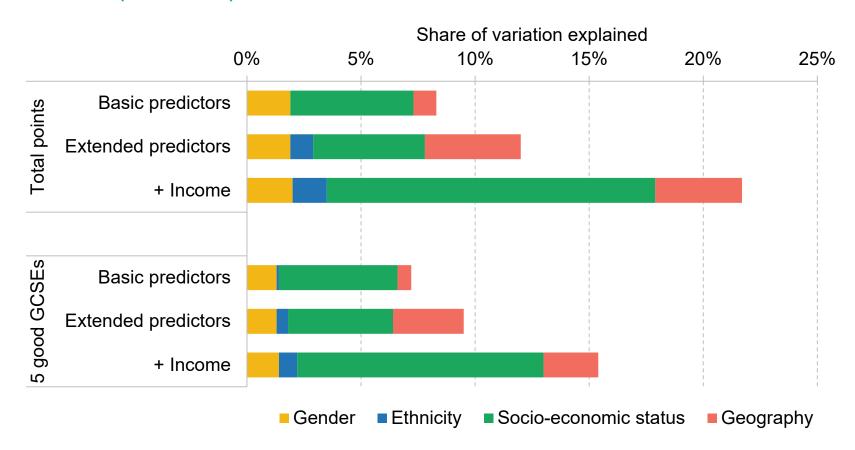


Source: Figure 45, Farguharson et al. (2022).

Income is a big predictor of attainment – but not the only one



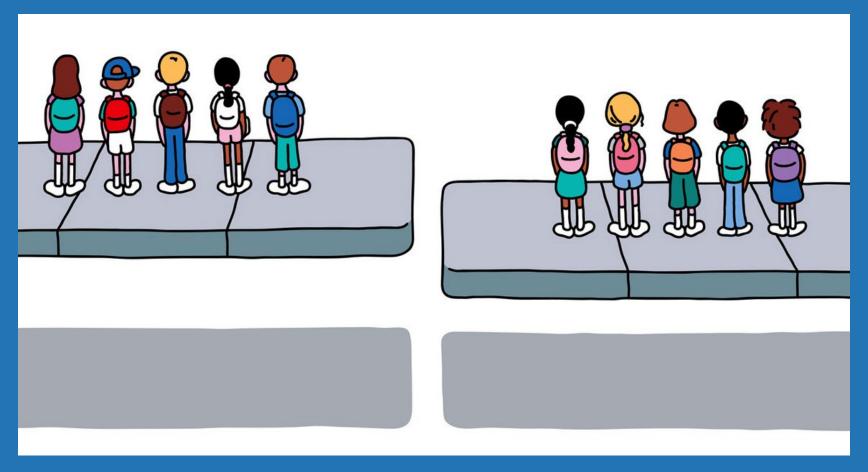
Contribution of different demographic factors to inequalities in educational attainment (MCS cohort)



Source: Figure 48, Farquharson et al. (2022).

Inequalities in education: How equal is the education system?





What are the issues with the existing education system?

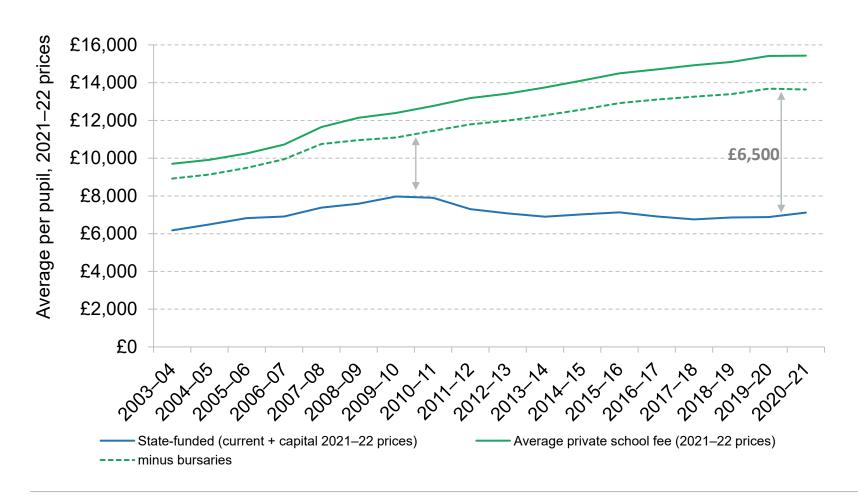


Big gaps in the resources available to different schools

The resource gap between private and state schools more than doubled between 2010 and 2020



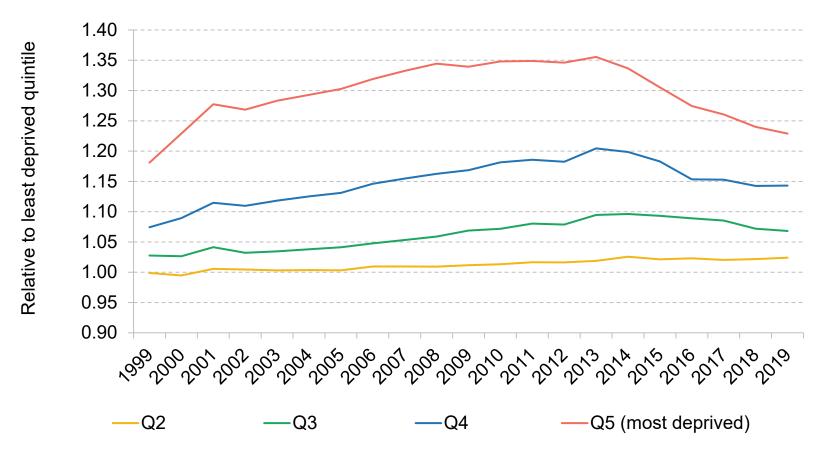
State school spending per pupil and average private school fees over time (2021–22 prices), England



School funding has become less progressive



Spending per primary school pupil by quintile of eligibility for free school meals, relative to least deprived quintile, England

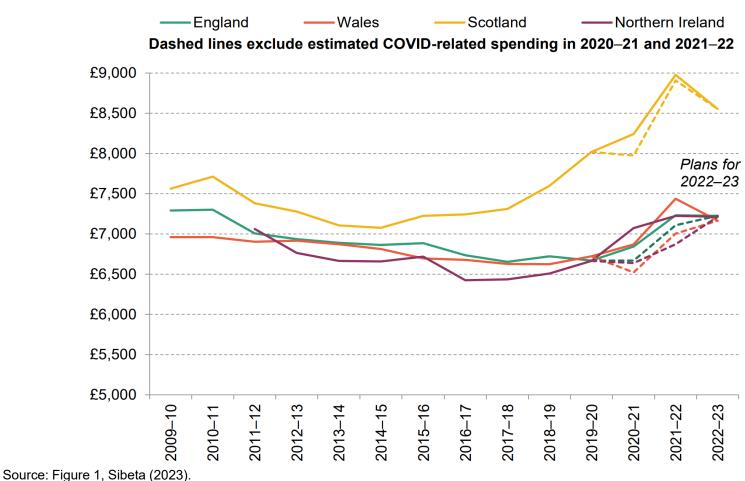


Source: Panel A, Figure 51, Farquharson et al. (2022).

School spending is *much* higher in Scotland than rUK

School spending per pupil by UK nation, 2022-23 prices (actual and planned)





What are the issues with the existing education system?



Big gaps in the resources available to different schools

 Private schools spend substantially more on students, and state school funding has become less progressive over time

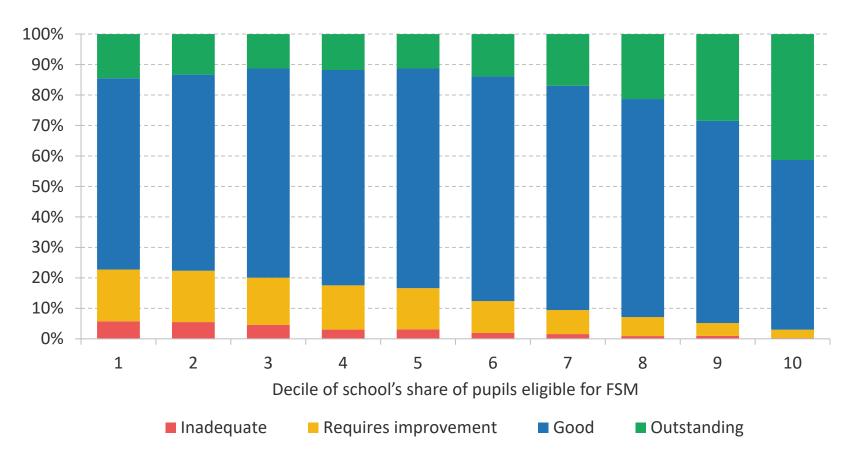
Disadvantaged schools are less likely to have high-quality teaching

 Teachers are less likely to hold a degree in their subject area, and teaching is less likely to be judged Good or Outstanding by the schools regulator

And poorer schools tend to have worse teaching

Inequality
The IFS Deaton Review

Ofsted ratings for quality of teaching, learning and assessment in statefunded schools in England (latest to August 2019)



Source: Figure 53, Farquharson et al. (2022).

What are the issues with the existing education system?



There are large differences in the resources available to different schools

 Private schools spend substantially more on students, and state school funding has become less progressive over time

Disadvantaged schools are less likely to have high-quality teachers

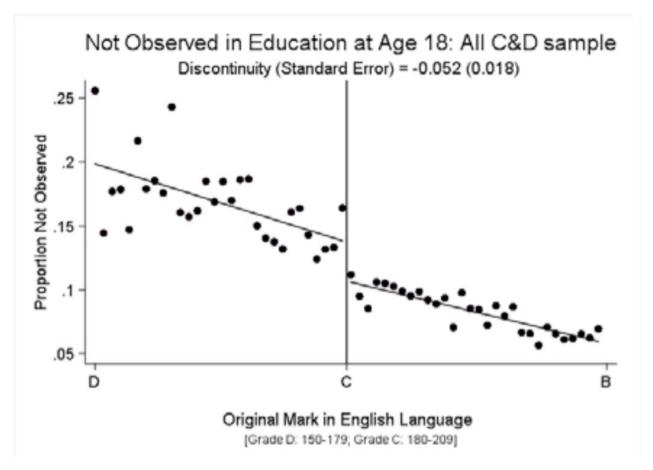
 Teachers are less likely to hold a degree in their subject area, and less likely to be judged Good or Outstanding by the schools regulator

High-stakes system coupled with few second chances

The English system is not kind to those who just miss out

Outcomes at age 18 for those who just miss out on a 'C' grade at GCSE



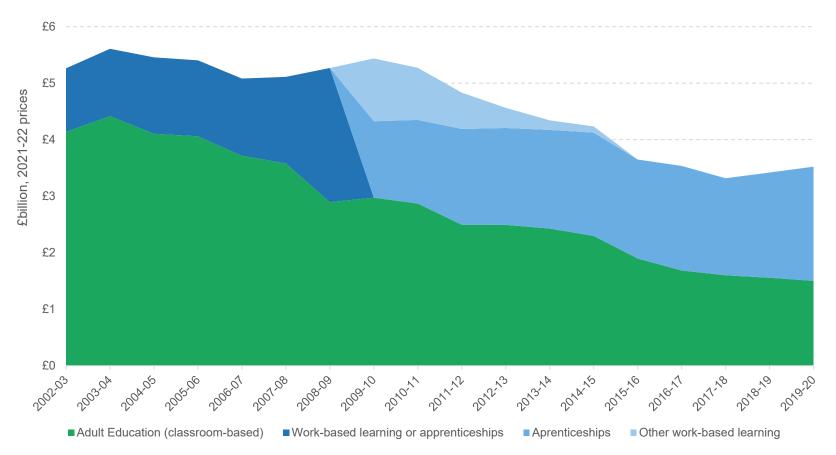


Source: Figure 6, Machin, McNally and Ruiz-Valenzuela (2018).

There are few 'second chances' for those who don't do well, both in the adult education system...



Total spending on adult education and skills, 2021-22 prices (England)

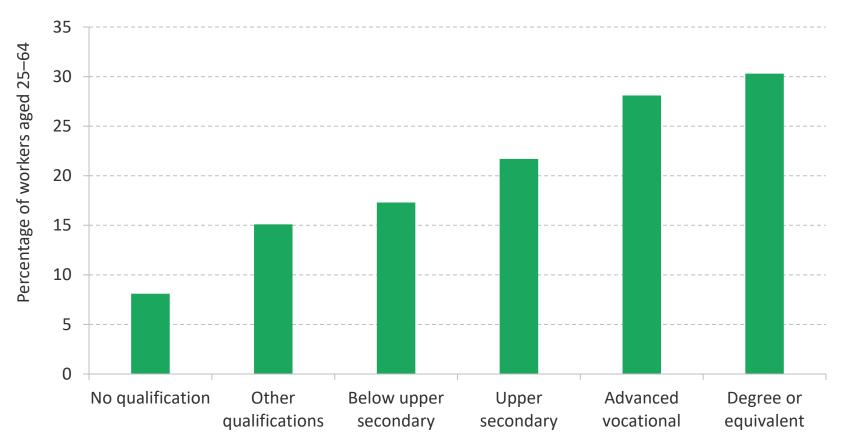


Source: Figure 4.2 in Britton et al (2020).

... and at work



Share of workers receiving employer-provided training in the last three months, by highest qualification level (2017, UK)



Source: Figure 58, Farquharson et al. (2022).

Building a more equal education system





Define the problem



Making progress on tackling educational inequalities means defining the problem(s) we're trying to solve

- Inequalities in education or by education?
- Educational inequalities themselves, or wider social issues?
- Focusing on skills and human capital, or qualifications?
- Reducing inequality per se, or boosting skills at the bottom?

Consider the root causes



Think about the education system as a whole

- Early interventions can be a powerful tool but must be followed up
- Don't ignore 'softer' skills they are essential to long-term success
- Resources are finite, so the allocation matters and there are difficult trade-offs here

And look outside the education system too

- Families differ in their knowledge and resources
- Today's income inequalities can become tomorrow's education inequalities
- Health, social services, economic insecurity, housing policy, tax and benefits system all play a role

But don't lose hope



Young people in the UK today are more qualified than ever

We've made progress in boosting some disadvantaged groups, e.g. women and ethnic minorities

 Though educational success for these groups is too often not rewarded as highly in the labour market

We all have an interest in raising skills and developing second chances

- Economic case productivity, resilience to labour market changes
- Moral case wildly different outcomes based on small differences at key moments