

Education, Equity and Social Mobility: A Summary of Three Research Papers

Produced by the Centre for Analysis of Social Exclusion (CASE) at the London School of Economics¹ and discussed at an event on 23rd January 2014.

Introduction

All three major political parties in England are committed to increasing social mobility, and favour action to close the gap in educational achievement between children from different socioeconomic backgrounds as a means to that end. But what evidence is there that social mobility is increasing, or that the education policies affecting today's children and young people will contribute to greater social mobility in future?

The LSE's Centre for the Study of Social Exclusion (CASE) is carrying out several pieces of research to investigate these questions, as part of its wider *Social Policy in a Cold Climate* research programme, funded by the Joseph Rowntree Foundation, the Nuffield Foundation and Trust for London. The first papers were published in July 2013².

Further findings relevant to this part of the programme were launched on January 23rd 2014, at a seminar on Education and Social Mobility, taking in work from the Institute of Education, University of London, and the Institute for Fiscal Studies, as well as our own. This paper summarises key themes and research findings from papers presented at the event:

- Blanden, J. & Macmillan, L. (2014) Education and Intergenerational Mobility: Help or Hindrance? CASEpaper (forthcoming)
- Chowdry, H., Crawford, C., Dearden, L., Goodman, A. & Vignoles, A. (2013) Widening participation in higher education: analysis using linked administrative data. *Journal of the Royal Statistical Society (Series A)*, Vol. 176, Part 2, pp. 431-457.
- Crawford, C. (2012) *Socioeconomic gaps in HE participation: how have they changed over time?* London: Institute for Fiscal Studies.
- Whitty, G. & Anders, J. (2014) (*How*) did Labour narrow the achievement and participation gap? LLAKES Research Paper 46. London: Institute of Education.

² Available at http://sticerd.lse.ac.uk/case/_new/research/Social_Policy_in_a_Cold_Climate.asp

Since education is an area for devolved government in Northern Ireland, Scotland and Wales, it should be noted that sections describing the impact of policies on gaps in educational attainment and higher education relate to England alone. However, some of the data on social mobility is drawn from longitudinal studies across the whole of the UK.

Trends in social mobility

Both the current Conservative-Liberal Democrat Coalition government in England and its Labour predecessor have made strong commitments to increasing social mobility. In particular, they have asserted the importance of reducing socioeconomic inequalities in the education system, so that everyone has a chance of success in life, whatever their background. For example, the Deputy Prime Minister, Nick Clegg, has stated that "...improving social mobility is the principal goal of the Coalition Government's social policy."ⁱ Michael Gove, the Education Secretary, earlier declared that "schools should be engines of social mobility"ⁱⁱ, while Ruth Kelly, a predecessor under Labour, described her Ministry as "the department for life chances"ⁱⁱⁱ.

To assess trends in social mobility, Jo Blanden and colleagues have published research in the past decade on the extent to which parents' income predicts the income of their children when they reach adulthood. Using data on families from national longitudinal studies following the lives of children born in 1958 and 1970, they have shown how income mobility declined at the end of the last century. They also demonstrated a close link with increasing inequalities in educational achievement.

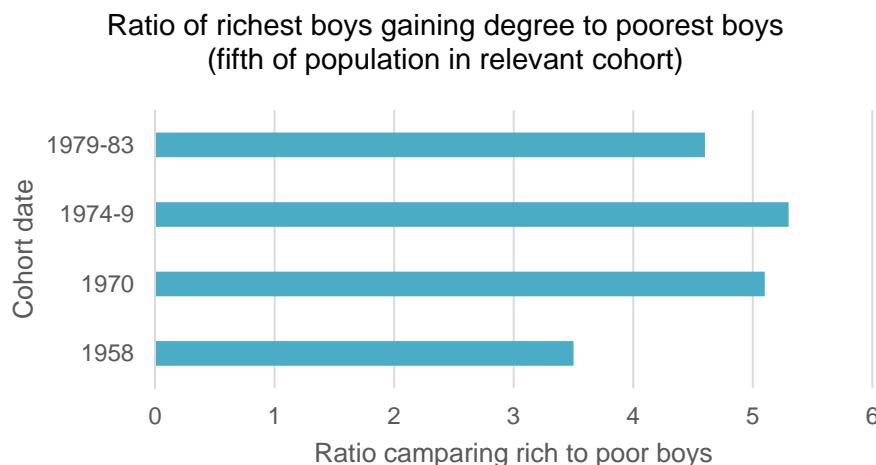
Jo Blanden and Lindsey Macmillan's forthcoming paper (2014) draws on updated data from the two cohort studies to compare the relative incomes of participants when aged 34³ with those of their parents. They also examine more recent data from the British Household Panel Survey (the BHPS, started in 1991) that allows comparisons at age 30 (although small numbers make it less than ideal for analysing relative income).

In addition, they assess a wide range of family background data and measures of educational inequality gathered at different stages in the lives of survey participants. When measuring educational inequalities they also draw on more recent data, including the Longitudinal Study of Young People in England (LSYPE) and the National Pupil Database (NPD).

Their findings confirm the results of earlier studies showing that social mobility declined between the 1958 and 1970 cohorts; although measuring income at a later age makes the persistence of incomes across generations even more pronounced. To illustrate, take two neighbouring families with 16 year old sons; , one with an income twice as high as the other. Then assume they both experience the average amount of income mobility in the population. If the boys were born in 1970 the son of the richer family would have earned about 40 per cent more than his poorer friend by the time they were aged 38.

Their analysis of educational attainment, comparing the degree qualifications of children from families in the most deprived fifth of each cohort with those in the least deprived fifth, also presents a picture of widening inequalities, contrasting children born in 1958 with those born in 1970. This gap grew even wider among a cohort of BHPS children born between 1974 and 1978. However it did narrow somewhat for a second cohort born between 1979 and 1983 – young people who reached 18 between 1997 and 2001. Expressed as a ratio, 3.5 children from the most advantaged backgrounds in the 1958 cohort obtained a degree for every child from the poorest families who did so. This increased to 5.3:1 among the first BHPS cohort, falling to 4.6:1 for the second BHPS group (Figure 1).

³ Difficulties modeling women's market participation meant the income analysis (but not educational inequalities) was restricted to men in the two cohorts.

Figure 1: Changing educational outcomes for poorer boys

Source: Blanden and Macmillan, 2014, Authors calculations from cohort studies and BHPS

An assessment of students obtaining at least one A-level adds to this indication that the trend towards greater socioeconomic inequality, apparent in the earlier cohorts, was checked and began to reverse for later ones. For example, among the LSYPE cohort (born in 1989/90) the ratio between the least and most deprived obtaining A-levels fell to 2:1, compared with 4:1 for those born in 1970.

But these findings relate to people who are now adults. What do we know about the current generation of children and young people?

School attainment and higher education

Access to higher education has expanded dramatically in England since 1960 from just 5 per cent of 17 to 30-year olds attending university to 47 per cent in 2010. Yet in the middle of the last decade (2004-5) figures showed that young people from the richest fifth of families were more than four times more likely to go to university aged 18 or 19 than those from the poorest fifth. And when it came to 'high status' institutions – those whose degrees most readily lead to the highest-paid jobs – young people from the richest fifth were almost ten times more likely to gain access than those from the poorest fifth of families.

More recently, the Office for Fair Access (OFFA) reported that although a higher proportion of the least advantaged 40 per cent of young people have gone to university since the mid-1990s, their participation rate at the most selective third of universities has not altered. Indeed, those from the most advantaged 20 per cent of families are more likely to attend elite institutions than they were in the mid-1990s.

Statistics like these have prompted calls for Russell Group and other high-status universities to broaden their appeal to students from more disadvantaged backgrounds and ensure their recruitment procedures do not discriminate unfairly against them. Yet research suggests that one of the main reasons for the persistent gap in participation rates lies with attainment levels at school. For example, a recent study concludes that success rates among university applicants can largely be predicted from their attainment at the end of primary school^{iv}.

Research by Haroon Chowdry, Claire Crawford and others (2013) at the Institute for Fiscal Studies has provided further insights by exploiting linked administrative data from English schools and UK colleges and universities. This makes it possible to track the educational careers from ages 11 to 20 of two cohorts (those who reached their GCSE year in 2001-2 and in 2006-7) consisting of half a million children each. Each student's socioeconomic (SES) background has been assessed using an index based on their eligibility for free school meals (FSMs) and measures of deprivation in their postcode area. Analysed together, these data

make it possible to assess how far gaps between high and low SES groups in accessing higher education can be explained by earlier attainment levels.

Before taking any account of prior attainment (and individual characteristics such as ethnicity, having English as an additional language or special educational needs) the analysis confirms that there is a steep socioeconomic gradient in higher education participation rates. This 'raw' gap is characterised by young men from the most disadvantaged fifth of the sample being 40 percentage points less likely to go to university than those in the most advantaged fifth. The equivalent gap for young women from the most disadvantaged families is 44 percentage points.

However, after statistical controls are applied to take account of their performance in tests at the end of primary school, a comparison between young people with similar individual characteristics and school backgrounds shows considerably smaller gaps (20.4 percentage points for boys and 25.1 percentage points for girls). This demonstrates that Key Stage 2 test results at age 11 are an important predictor, but do not account for the whole difference in HE participation rates between the two groups. It is only once further controls are applied for young people's scores in tests at age 14, plus their GCSE and A-level results, that the gap in university access between the most advantaged and least advantage fifth shrinks to just 3.9 percentage points for boys and 5.3 percentage points for girls.

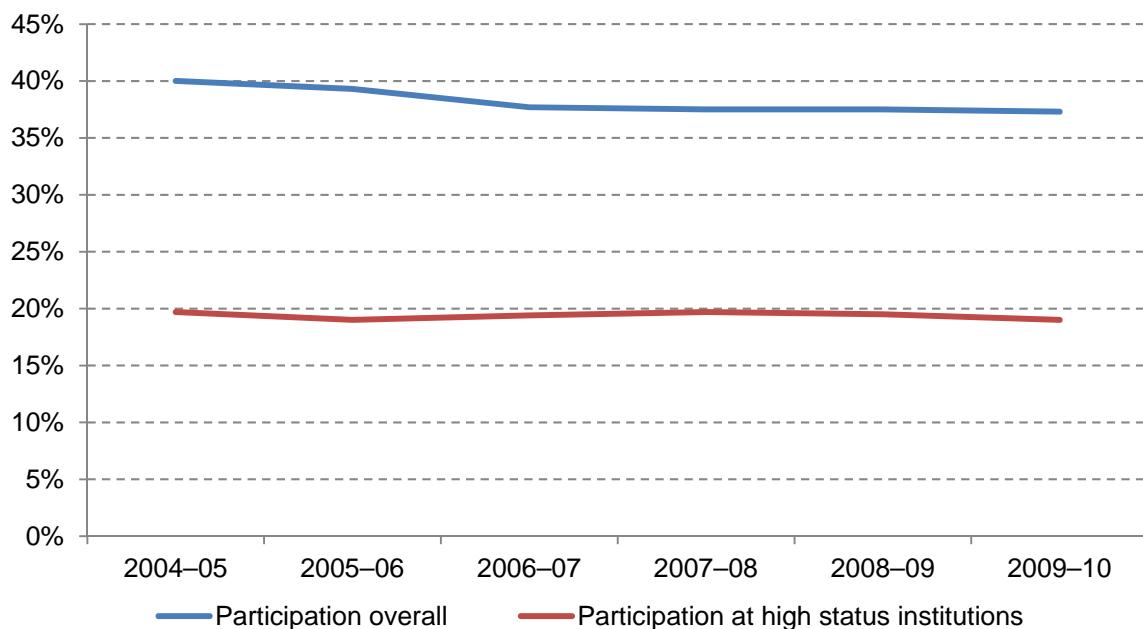
To gauge the relationship between socioeconomic background and attendance at a high-status institution, the researchers conducted a further analysis, looking at the backgrounds of young people who went to university, to see which students did and did not attend a high status institution. This shows that male students from the most disadvantaged fifth of the sample were 31.2 percentage points less likely to attend a high-status university than those from the top fifth, and that the equivalent gap for women students was 31.9 percentage points. The use of statistical controls suggests that up to 70 per cent of this gap can be explained by individual characteristics, school effects and Key Stage 2 test scores.

From this evidence, the researchers conclude that interventions to increase university participation amongst students from socially deprived backgrounds need to start early – certainly in secondary school and perhaps even in primary school. Such support could be provided by schools, but universities, including elite institutions, may wish to focus their outreach efforts on younger children as well.

The role of HE tuition fees

One of the most prominent policy debates in relation to university access since the 1990s has been over a revolution in the way that undergraduate teaching is financed. Has the new system of tuition fees and student loans – with controversial fee increases – deterred young people from poorer families from attending university? A further analysis conducted by the IFS (Crawford 2012) suggests that tuition fees – at least when accompanied by grants and loans to cover the costs – do not necessarily have such negative effects. .

Figure 2: Percentage point differences in HE participation rates between the most and least deprived fifth of state school students over time



Source: based on IFS (2012)

Data available to the researchers did not extend to 2012-13 when the Coalition introduced a very substantial fee increase (from £3,290 to a maximum £9,000 a year) for England-residing students. However, their analysis of the impact of a more modest fee increase in 2006-7 reveals only a small dip in university attendance rates that was more pronounced among better-off students than those from deprived families.

In fact, the gap in university participation between those from the most and least deprived fifths of the population actually narrowed slightly over the 2000s – from 40 percentage points in 2004–05 to 37.3 percentage points in 2009–10 – although to a lesser extent in terms of high status participation. This chimes with Blanden and Macmillan's results for earlier cohorts.

Can education policies 'narrow the gap'?

If school-age attainment is the main driver of access to higher education, what does the most recent evidence reveal about educational inequalities at school level? Is it reasonable to expect that policies designed to close socioeconomic gaps in school achievement will necessarily create wider access to higher education and – thereafter – lead to greater social mobility?

A review paper by Geoff Whitty and Jake Anders (2014) assesses the impact of Labour's policies for 'narrowing the gap' in attainment between 1997-2010 and their effects.⁴ It concludes that, by most measures, a small reduction did take place between 1997 and 2010, although it cannot be said to have matched the Government's aspirations. Thus, Government figures from 1999 to 2003 on students achieving five or more GCSEs at grades A* to C suggest a slight reduction in the attainment gap between those from manual and non-manual worker families. Office for National Statistics data covering 2002 to 2005 also show a narrowing

⁴ This adds further evidence and another perspective to Ruth Lupton and Polina Obolenskaya's 2013 Social Policy in a Cold Climate Working Paper *Labour's Record on Education*.
<http://sticerd.lse.ac.uk/dps/case/spcc/wp03.pdf>

gap between FSM-eligible students and others. However, these figures suggest that some of the narrowing was driven by less advantaged students taking alternative qualifications, whose equivalence to GCSEs has been disputed.

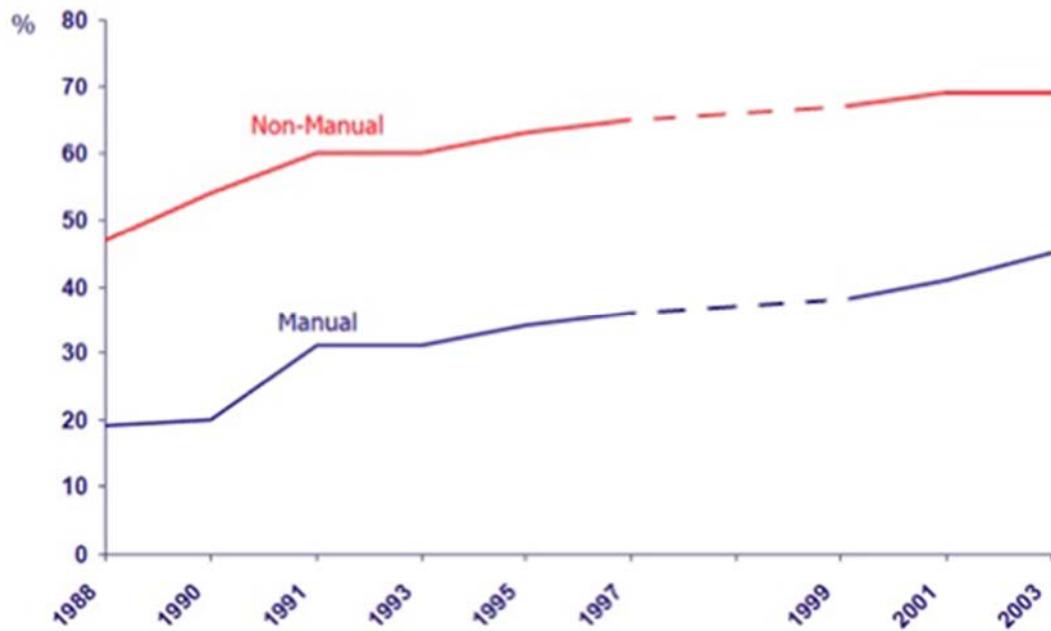
Equivalent figures for 2005/06 to 2010/11 reveal a continuing mixed picture. The proportion of students gaining five GCSEs at A* to C increased slightly more among those eligible for FSMs, than others. But the proportion obtaining five GCSEs including English and Maths at those grades increased slightly more slowly. The authors also present some recent DfE data that suggest that the gap remains stubbornly large when looking at other 'elite measures', including the English Baccalaureate.

A more marked closing of the gap during Labour's earlier years emerges from a comparison between students living in disadvantaged neighbourhoods (using the Government's Income Deprivation Affecting Children Index) and those from the least deprived areas. Analyses assessing the third term from 2005 also tend to show the correlation between household deprivation and children's achievement in school growing weaker.

Indications of a narrower socioeconomic gap in school attainment are supported by Blanden and Macmillan's new analysis of data from the National Pupil Database (NPD). Comparing the GCSE results of young people who finished Key Stage 4 in 2002 with 2011, it finds that the ratio between those eligible for FSMs and other students who obtained five or more passes at A* to C fell from 2.3:1 to 1.3:1. A comparable shift can be seen for the results from Key Stage 2 tests, taken when children were aged 11.

If it is accepted that the attainment gap narrowed somewhat between children from different socioeconomic backgrounds under Labour, was it Government policies that brought this about? Whitty and Anders argue that the numerous education initiatives launched by Labour – and a tendency to adjust them without robust evaluation – make it difficult to determine which were effective.

Figure 3: Percentage of Cohort Achieving 5+ A*-C GCSEs by Parents' Social Class: 1988-2003



Source: DfES (2006)

For some policies – including reduced class sizes, Education Action Zones, Excellence in Cities and greater use of teaching assistants – the evidence of any positive influence on the attainment gap is, at best, equivocal. In other cases there are more credible indications of a positive impact. In particular:

- *The National Strategies* on literacy (from 1998) and numeracy (from 1999) produced gains, at least during their pilot phase, in the test scores of participating primary schools, compared with non-participants. Evaluators noted stronger effects among children with lower levels of attainment than others.
- *Academies* exemplified Labour's later expectations that greater school autonomy, dynamic leadership and private sponsorship would improve performance. Some academies were new secondary schools in disadvantaged areas; others were created to 'turn around' failing schools. Evaluations have suggested that academies raised GCSE attainment compared with non-academies serving similar areas. But there are indications that academies created before 2008 increased attainment among already-able students more than others and that later 'converts' did not achieve the same improvements.
- The *London Challenge*, introduced in 2003, was a partnership between central and local government to transform failing schools into academies and raise overall standards, targeting intensive support on the capital's most deprived boroughs. Between 2003 and 2006 the proportion of students with five or more GCSE passes at A* to C rose faster in London than nationally – and even faster in the disadvantaged boroughs.
- *Extended Schools*, delivering childcare, homework clubs and other support services as part of an extended school day, were introduced in London and elsewhere. An evaluation of pilot 'full service' secondary schools found the proportion of students achieving five good GCSEs rose faster than the national average, and that the achievement gap narrowed between FSM-eligible and non-FSM students.

Other initiatives where improved learning may have specially benefitted disadvantaged children include the one-to-one *Reading Recovery* intervention that Labour incorporated into its later *Every Child a Reader* programme and the *Teach First* initiative that sought to attract highly qualified graduates to teach in disadvantaged areas.

Whitty, Anders and other reviewers have noted that Labour's more promising initiatives relied on collaboration, rather than competition, between schools to raise academic achievement in disadvantaged areas. They have also highlighted the limits to what schools can achieve on their own when it comes to narrowing the attainment gap. Sustained improvements in outcomes seem likely to require changes across a range of children's services, not just education.

The implications for social mobility

Since social mobility and educational inequality are linked, it should be possible to speculate in an informed way about future trends in mobility by looking at current trends in education. Any narrowing of the gap should, in theory, translate over time into greater mobility so that it becomes less easy to predict an adult's position on the income scale from knowing where their parents were placed. However, it is also possible that any positive long-term effects on social mobility could be muted unless success in closing the attainment gap extends to the highest levels of academic attainment.

Like Whitty and Anders, Blanden and Macmillan have explored this further by using different measurements to assess what is happening at the top of the educational achievement distribution. Thus, looking at the proportion of GCSE students who achieve A*-C grades in subjects defined by the Coalition Government as a notional 'English Baccalaureate' – English, Maths, two Science Subjects, History or Geography and a Language – Blanden and Macmillan find that strikingly few children could claim this qualification: just 18 per cent in 2004 falling to 15 per cent in 2010. Moreover, the proportion of children eligible for free school meals with the relevant passes was just 4 per cent in both years.

The researchers also looked at students whose grades at GCSE – expressed as a 'capped total score' – marked them out as high achievers. As a yardstick of higher attainment, they took the score in 2004 that would have put an individual in the top fifth of the distribution. For subsequent years the data showed an increase in

the proportion of young people eligible for FSMs who reached this score, but the proportion of non-eligible students grew faster – thereby widening the gap.

Thirdly, Blanden and Macmillan examined the proportion of A-level students obtaining grades A* to B in three or more ‘facilitating subjects’,⁵ – those that appeal most to elite universities. Here, there was no clear trend across the period from 2004 and 2010 in the gap between non-FSM and FSM pupils hitting this target. This suggests that overall gains in reducing educational inequality are not playing out at the very top of the attainment distribution. This accords with evidence from the Programme for International Student Assessment (PISA) where the reading test scores from English 15-year olds point to a significant reduction in achievement gaps for the lower tail of the achievement distribution, but not the top⁶. Nevertheless, on a potentially more positive note there is evidence from Key Stage 2 results between 2002 and 2010 that FSM children have been closing the gap with non-eligible children in achieving higher scores (Level 5 or above) in English and Maths tests at age 11.

Conclusion and further research

The studies summarised in this paper, alongside other recent research, point to a narrowing of the gap between the educational achievements of children from more and less disadvantaged families. This might be expected to translate over time into increased social mobility between generations. However, less progress in reducing inequalities at the highest levels of educational attainment raises doubts over the extent to which this will happen.

During 2014, the Social Policy in a Cold Climate research team will be conducting further work on education and social mobility, including a review of the Coalition’s education policy record, with a particular focus on poverty and inequality. These papers will be published in January 2015.

Summary by David Utting

References

ⁱ Foreword to *Opening Doors, Breaking Barriers. A Strategy for Social Mobility*. H.M. Government, April 2011.

ⁱⁱ Department for Education press release, 26/7/2010

ⁱⁱⁱ Interview with *Children & Young People Now*, 5/10/2005

^{iv} Anders, J. (2012) The link between household income, university applications and university attendance. *Fiscal Studies*, Vol. 33 (2), 185-210.

^v Jerrim, J. (2012) The socio-economic gradient in teenagers’ reading skills: How does England compare with other countries? *Fiscal Studies*, Vol. 53 (2), 159-184.

⁵ ‘Facilitating subjects’ are defined as English Literature, Maths, Further Maths, Physics, Chemistry, Biology, Modern Languages, Classical Languages and Humanities.