



INVESTIGATING INEQUALITIES IN EDUCATIONAL ATTAINMENT

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When, in 1996, Tony Blair gave his final speech to the Labour party conference before becoming Prime Minister the following year, he famously said, “*Ask me my three main priorities for government, and I tell you: education, education, education*” (Speech to Party Conference, October 1996). One feature of modern social and political rhetoric is an almost unquestioning acceptance that education offers social and economic benefits, and that it is essential for the effective functioning of a post-industrial society. This rhetoric appears to have driven the significant educational expansion and reform observed in all western societies.

Despite this educational expansion and reform, sociologists have demonstrated that there are in fact significant inequalities in educational attainment; social class, ethnic origin and sex have all been found to affect educational attainment.

In the context of substantial inequalities in educational attainment related to social background, increasing numbers of sociologists have recognised that it is important to take into account the distinction made by Boudon (1974) between ‘primary’ and ‘secondary’ effects. Boudon argued that inequalities between classes (or other groups) should be seen as the result of two separate processes. First, students from different class backgrounds have different levels of academic performance, perhaps due to cultural, genetic or social differences between classes. These differences in academic performance will lead to different rates of transition to higher levels of education (‘primary’ effects). But we also need to consider a second process, whereby among students with exactly the same level of academic performance, those from more advantaged class backgrounds are more likely to make the decision to continue to higher levels of education than those from less-advantaged class backgrounds (‘secondary’ effects).

This project examined the extent of class, sex and ethnic inequalities and how these inequalities change over

time. It also considered the relative importance of primary and secondary effects in creating inequalities in educational attainment.

Key findings

The key findings are as follows:

- There are significant and substantial class inequalities in transition rates from compulsory schooling to A-level education and from A-level to university degree. Class inequalities in the transition to university degree after A-level education are smaller than inequalities in the transition from compulsory schooling to A-level.
- There is little evidence that class inequalities in transition rates have changed over the past quarter of a century.
- Both primary and secondary effects contribute to the overall inequalities between classes in the transitions from compulsory schooling to A-level, and from A-level to university degree. Primary effects contribute more to the overall inequality between classes than secondary effects in the transition from compulsory schooling to A-level, but secondary effects have a greater contribution than primary effects when it comes to the transition from A-level to university degree.
- There are significant differences between ethnic groups in transition rates from compulsory schooling to A-level education, and from A-level education to university degree, and it is clear that the white majority population is far from being the most advantaged ethnic group.
- If we were able to equalise GCSE performance across different ethnic groups, counterfactual analyses suggest that almost all ethnic minority groups would

continue to A-level education at a higher rate than the white majority. Similarly, all ethnic minority groups would have higher transition rates from A-level to university degree than the white majority if A-level performance was equalised across all ethnic groups.

- Sex inequalities in the transitions considered here are much smaller than class and ethnic inequalities.

Data

Statistical analysis was carried out using several of Britain's large-scale sample surveys: the National Child Development Study (NCDS) (following a cohort of individuals born in 1958), the British Cohort Study (BCS) (following a cohort of individuals born in 1970), and the Youth Cohort Studies (YCS) (a series of surveys, following separate cohorts of 16 year olds).

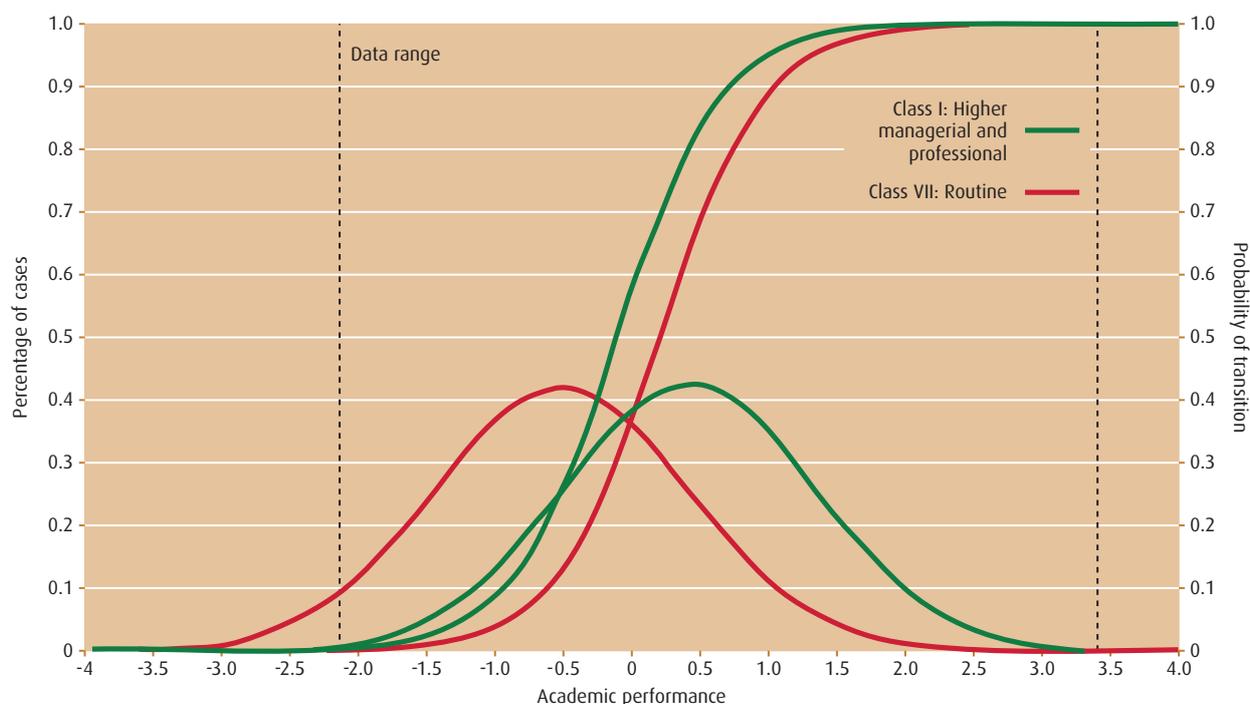
Class inequalities

This section summarises the main findings in relation to social class inequalities in educational attainment. As regards present-day class inequalities in educational attainment, the research suggests that there are significant and substantial inequalities in transition rates from compulsory to A-level education and from A-level to university degree. The most recent dataset available for analysis during the grant was YCS 12, which followed a cohort of students who turned 16 in 2004.

Considering the transition to A-level education at the end of compulsory schooling, we see that, in 2004, students of class I background (higher managerial and professional occupations) have a transition rate of 71%, while students of class VII background (routine occupations) have a transition rate of only 27%. Indeed, there is an almost monotonic decline in the transition rate as we move from the top to the bottom of the class structure. The odds ratios expressing inequalities between classes show that students originating in class I are almost six and a half times more likely than students originating in class VII to make the transition to A-level education rather than not.

Class inequalities are also present in the transition to university degree after A-level education, although these inequalities appear to be smaller than the inequalities relating to the transition from compulsory schooling to A-level education. This is not at all surprising, given that those taking A-level examinations are already members of a relatively selective group. But while the inequalities are smaller, they are still considerable (e.g. in 2004, among students with A-level grades, those originating in class I are just under three times more likely than students originating in class VII to make the transition to university degree rather than not).

There is little evidence to show that inequalities in transition rates have changed to any significant extent over time. For example, in Jackson *et al.* (2007), we show that class inequalities in the transition to A-level education have remained fairly constant over the past quarter of a century, and that no significant change in the association between class background and transition rates can be detected.



Total n=10,740, weighted data from YCS12

FIGURE 1. GRAPHICAL REPRESENTATION OF THE TRANSITION TO A-LEVEL EDUCATION FOR STUDENTS ORIGINATING IN CLASS I: HIGHER MANAGERIAL AND PROFESSIONAL OCCUPATIONS AND CLASS VII: ROUTINE OCCUPATIONS



Let us now consider the relative importance of primary and secondary effects in creating the observed inequalities. Figure 1 shows a graphical representation of the influence of primary and secondary effects on class inequalities in the transition to A-level in 2004 (Jackson, 2009); to simplify the presentation, only results relating to classes I and VII are displayed in the figure.

To represent primary effects, for each social class, the mean and standard deviation of GCSE performance scores were substituted into the equation for a normal distribution, and then plotted on the graph. To represent secondary effects, a binary logistic regression was estimated for each class separately, in which performance served to predict whether an individual enters A-level education or not. The coefficients from these regressions were then substituted into the predicted probability equation, producing the S-shaped curves. The green lines represent the performance and transition curves for class I, while the red lines represent the curves for class VII.

Figure 1 shows that both primary and secondary effects are at work in creating the inequality observed when we compare students originating in class I to those originating in class VII. The influence of primary effects can be shown in the class differences in the normal distribution curves: the normal distribution curve for students of class I background is further to the right than the curve for students of class VII background, demonstrating that there are class differences in levels of GCSE performance which will feed in to transition rates. But the logistic regression predicted probability curves also suggest that secondary effects are at work: at the same levels of GCSE performance, individuals of class I background are more likely to make the transition to A-level education than individuals of class VII background.

Using the method described in Erikson *et al.* (2005), we can establish the relative importance of primary and secondary effects in creating the overall class inequality in the transition to A-level education. The results show that primary effects generally contribute more to the overall inequality between classes than secondary effects; if we were to eliminate differences between classes in levels of GCSE performance, class inequalities in the transition to A-level education would be substantially reduced (as much as a 75% reduction in inequality might be observed). But when it comes to the transition to university degree from A-level education, secondary effects have a much more important role, and appear to contribute more to the overall inequality between classes than primary effects.

The results relating to class inequalities therefore suggest that such inequalities are persistent, and that their magnitude has changed little in recent decades. Both primary and secondary effects have been shown to contribute to the overall inequalities between the classes in the transitions from compulsory schooling to A-level, and from A-level to university degree.

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