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What are the overall effects on educational attainment of widening access to the more academic track? Research by **Eric Maurin** and **Sandra McNally** investigates using the ‘natural experiment’ of the grammar school system in Northern Ireland, which has survived long after its dismantlement in England.

Widening access to grammar schools: the educational impact in Northern Ireland

It is difficult to know whether widening access to schools that provide a more academically orientated, general education makes a difference to average educational achievement. Although there has been a shift in this direction in many OECD countries, reforms have been difficult to evaluate because they are often accompanied by other important changes to the educational system or because they have been introduced at the same time everywhere so there are no comparison groups.

But the consequences of such reform are deeply controversial and very much a current policy issue. In particular, opponents argue that increasing access to the more academic track harms the quality of education for everyone without improving the prospects of those able to attend the academic track.

Our research makes use of a unique ‘natural experiment’ to identify the net effects on overall educational outcomes of widening access to schools that provide a

more academically orientated, general education.

Specifically, we consider the consequences of a reform that affected access to grammar schools in Northern Ireland, when England is used as the comparison group. The two regions of the UK differ in that the grammar school system has been retained in Northern Ireland whereas it was gradually dismantled in England in the 1960s and 1970s.

The hallmark of the grammar school system is that children are selected on the basis of measured ability at the age of 10 or 11 whereas in the comprehensive system, children of different abilities are educated in the same schools. The ‘selective aspect’ of the education system is currently under review by the new administration in Northern Ireland.

Widening access to the more academic track can generate positive net effects

Although the education systems of England and Northern Ireland are also different in other respects (for example, the schools in the latter are mostly segregated by religion), there are important similarities. The two regions have broadly the same curriculum and they have the same examinations for students at the ages of 16 (GCSEs) and 18 (A-levels).

The important considerations for our research are that the examinations are comparable across the two regions and that the reform only occurred in one of them. That reform consisted of widening access to the more academic track within Northern Ireland at the time of the ‘open enrolment’ reform in the late 1980s. This is the only differential change that happened across the two regions.

Our research shows that the reform enabled a very significant increase in the number of Northern Irish pupils who could attend the more academic track (grammar schools) at the end of primary school, between the pre-reform birth cohort

When more pupils were able to attend Northern Irish grammar schools, overall educational attainment increased

(children born in 1978) and the post-reform birth cohort (those born in 1979). By comparing educational outcomes in Northern Ireland and England before and after the reform, we can identify the effect of widening access to the academic track on overall educational attainment.

Using administrative data before and after the reform, we find that the open enrolment reform of 1989 (which affected the 1979 birth cohort) had a clear impact in Northern Ireland relative to England. A 15 percentage point increase in the number of pupils enabled to attend grammar school (at the age of 11) was accompanied by shifts of similar magnitude in the number achieving five or more GCSEs at A*-C and one or more A-level. This suggests a strong causal effect of expanding the more academic track on overall educational achievement.

Just before the reform, there was a change affecting admissions in a qualitative way. Up to 1988, girls and boys were assessed in different categories so that the same percentage of entrants to the admission test would obtain a given grade (determining whether or not they could be admitted to grammar school). Following a high court ruling in June 1988, this practice was discontinued and from then on, girls and boys were assessed together (affecting grammar school intakes in 1989, the 1978 birth cohort).

This change was to the advantage of girls since they outperformed boys on the verbal reasoning tests that were the basis of selection. The one-year gap between this qualitative change to admissions and the open enrolment reform generated significant upward and downward shifts in the relative proportion of girls enabled to attend grammar school across the cohorts born between 1977 and 1980.

We find that these shifts have been followed by parallel shifts in girls' subsequent relative outcomes at the ages of 16 and 18. This confirms the considerable effect of grammar school entry on educational outcomes using a different source of identification to that used for comparing outcomes over time



between England and Northern Ireland. We also replicate this latter analysis for boys and girls separately and confirm our earlier results.

Thus, whether we compare girls and boys within Northern Ireland or make comparisons by gender between Northern Ireland and England, it is clear that grammar school reforms have a strong impact on educational outcomes. Furthermore, the design of the educational system – in this case, the mechanism of entry into grammar schools – has consequences for gender differences in educational outcomes.

As well as considering the overall effect of expanding the academic track on educational outcomes, we are able to use the same experiment to consider whether the selective system is a contributory factor to observed inequalities between socio-economic groups with regard to later educational outcomes. Specifically, we can analyse the effect of the reform according to whether children are eligible for free school meals, which roughly corresponds to families in the bottom quarter of the income distribution.

We find that there were big differences

Grammar school attendance had no less effect on relatively disadvantaged pupils than on more advantaged pupils

before and after the reform between the probabilities of lower-income groups entering grammar school and achieving good educational outcomes at the ages of 16 and 18. The reform had an equal impact on children with and without free school meals in terms of entry to grammar school and educational achievement at the ages of 16 and 18.

Hence, we conclude that grammar school attendance had no less effect on relatively disadvantaged pupils than it had on more advantaged pupils. Therefore, the barriers that make it difficult for children eligible for free school meals to enter grammar schools in the first place (such as lower test scores at the age of 11 because of lower parental resources) have a long-term effect on inequality due (in part) to the lower probability of children on free school meals entering grammar school.

Although this research cannot be interpreted as evaluating the overall effects of a comprehensive or selective ('tracked') system of education, it is an example of where widening access to the more academic track has generated positive net effects. It illustrates the high price that pupils pay for being excluded from the academic track, even when they are some way down the ability distribution within their birth cohort.

The study also provides clear evidence that selection into the more academic track really has a causal impact – the improvement in educational outcomes is not simply an artefact of the selection process.

This article summarises 'Educational Effects of Widening Access to the Academic Track: A Natural Experiment' by Eric Maurin and Sandra McNally, a forthcoming Discussion Paper from the Centre for the Economics of Education (CEE) at CEP.

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