

# Research impact: making a difference

## Applying economic appraisal to improve educational outcomes

Empirical analyses by the Centre for the Economics of Education (CEE) shed new light on the factors affecting educational outcomes

### What was the problem?

Education presents a minefield of competing ideologies, but whatever someone's political or professional persuasion, they want to know which educational approaches achieve the best results.

In particular, policymakers seek answers to a range of critical questions, including: does giving inner-city schools more resources necessarily improve the educational attainment of their pupils? Does competition on its own boost a school's performance, or are there additional, perhaps even more significant, factors? And is there a way to gauge the effectiveness of policies that have not yet been implemented?

### What did we do?

In March 2000 the LSE Centre for Economic Performance (CEP) joined with two external partners—the Institute for Fiscal Studies and the Institute for Education—to form the multidisciplinary Centre for the Economics of Education (CEE), dedicated to applying the latest techniques of empirical analysis in investigations of educational policies and their outcomes.

The Centre is housed at LSE and led by Professor Stephen Machin, the Research Director for the Centre for Economic Performance. The research conducted by LSE academics for CEE has focused on three key areas: apprenticeships; school competition and autonomy; and educational policies.

Dr Hilary Steedman, a CEP Senior Research Fellow, has conducted research into apprenticeships for many years. Her work has revealed the low returns offered by the UK's system of vocational qualifications, as well as its relative weakness in easing less academically inclined pupils into work in comparison with other countries such as Germany.

LSE research into school competition and autonomy has been conducted primarily by Machin, Professor of Economic Geography Stephen Gibbons and Dr Olmo Silva, a CEP Research Associate. These researchers used data on catchment areas to explore whether pupils in English primary schools facing more competition fared better than pupils at schools with less competition, and concluded that competition had a positive effect, but only for voluntary-aided schools that enjoyed greater autonomy in running their own affairs.

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A third prong of CEE work is focused on evaluating specific educational policies. LSE academics have conducted research on the teaching of literacy in primary schools, the effect of more resources on inner-city schools, and whether academy status leads to better performance.

An evaluation of the 'literacy hour', a national initiative introduced in 1998 to encourage literacy, showed that reading performance among primary school children improved.

A similar conclusion was reached by Machin, Professor Costas Meghir of the Institute for Fiscal Studies and LSE Professor Sandra McNally in their evaluation of the Labour administration's Excellence in Cities programme, which put more resources into inner-city schools. Their work revealed that more resources did indeed improve performance in the form of a positive effect on student attendance and on pupil attainment in Mathematics (but not in English).

A more recent study by Gibbons, McNally and Research Associate Martina Viarengo used anomalies in school funding in England to explore the effect of increasing expenditure on urban schools. This study also found that funding disparities gave rise to sizeable differences in national tests at the end of primary school.

Other policy appraisals have considered the higher attainment of pupils at faith primary schools—largely achieved through selection policies, the researchers concluded—and an investigation into whether academies lead to increased performance.

## What happened?

CEE research into vocational education has had a major impact on the thinking of successive UK governments. More than 15 years of research into apprenticeships influenced the Apprenticeships, Skills, Children and Learning Act 2009, guaranteeing apprenticeships for all school leavers with five GCSE grades and above. The coalition government then commissioned Professor Alison Wolf of King's College London to carry out an independent review of vocational education, and her report, published in 2011, made extensive reference to CEE research.

CEE research has also contributed empirical evidence to the highly contested debate about whether greater parental choice and more competition among schools can help drive up educational standards. In particular, CEE's paper on school autonomy was influential in convincing the coalition government that, indeed, schools needed to enjoy greater autonomy if competition were to have the desired performance effect.

A CEE briefing on research into academies showed that high-achieving schools were the ones most interested in becoming academies. This finding influenced the Secretary of State for Education's decision in June 2011 to persuade underperforming schools to become academies and to roll out the academies programme to a wider range of schools.

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The impact of CEE's policy evaluations can also be seen in decisions to increase the pupil premium (designed to raise the educational attainment of disadvantaged pupils) and to tighten the admissions code of faith schools to prevent the use of admission procedures as a backdoor route to pupil selection.

In terms of advisory relationships, the National Audit Office (NAO) requested McNally's assistance in reviewing the quality of policy evaluations across government departments. CEE itself (through the Centre for Economic Performance) was appointed to the first Evaluation Panel of the Education Endowment Foundation, an independent grant-making charity, and Machin was asked to serve as a member of its Evaluation Advisory Group.

Further to this, CEE researchers have received regular invitations from government officials to discuss education policy, including: discussing the alignment of academic thinking and current policy in the Department for Business, Innovation & Skills (BIS); meeting with Department for Education representatives on childcare policy and on building the evidence base around technology in education; and discussing key ways to improve life chances for people more likely to end up deprived.

## Funding

LSE was the budget holder for core grants of over £3 million from the Department for Education (previously the Department for Education and Employment) between 1999 and 2009. Additional funding of some £6 million came from external sources, including the European Commission, HM Treasury and the Economic and Social Research Council.

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