

CMRE Research Digest 2014-06 (3)

Editor: Gabriel Heller Sahlgren

Table of Contents

Editor's Pick.....	3
Effects of Policy and Practice – Developed World.....	5
Effects of Policy and Practice – Developing World.....	8
General Education	9

Editor's Pick

Estimating the Effect of Teacher Pay on Pupil Attainment using Boundary Discontinuities

IFS Working Paper W14/03

www.ifs.org.uk/wps/wp1403.pdf

By: Ellen Greaves and Luke Sibieta

The issue of teacher pay is controversial worldwide. Some argue that higher pay is necessary to increase the status of teachers, and thus draw and keep more high-ability individuals in the profession, as well as increase effort. However, others claim that higher across-the-board pay is not an efficient way to improve outcomes. First, higher salaries will not change the incentives to raise outcomes efficiently, which traditionally have been weak. Second, it has proven very difficult to separate who will become a good teacher based on their observable characteristics. And if it is difficult to separate good teachers from bad ones at the selection stage, we may not necessarily get better teachers for more money.

In a new paper, economists Greaves and Sibieta analyse the issue in the English context. Since national pay scales have been a defining feature of the teacher labour market for long, salaries are basically the same all over the country. The exception is that there are three London weightings. This means that there are three different boundaries where the salaries for equivalent teachers vary depending on which side of the boundary the schools are situated. The authors focus on boundary between 'fringe London' and the rest of England and Wales.

By using a so-called 'regression-discontinuity design', they are able to compare like for like. The idea is that teachers in schools close to the fringe London boundary are likely to live in similar neighbourhoods and be at the same point in the pay scale, but still get paid differently simply because they work at schools on different sides of the boundary. This means that the authors can separate causation from correlation.

The authors find no impact whatsoever of about 5% (about £1,000) higher salaries on KS2 test scores in mathematics and English. The authors therefore argue that there is little evidence that higher salaries induce higher-quality teachers to sort into the communities in which they are paid more. This could be either because teachers are not sensitive to these salary differences, or because schools might find it difficult to separate high-quality teachers from low-quality teachers. In conclusion, then, authors argue that merely offering higher salaries across-the-board to teachers is unlikely to be an effective strategy for raising pupil performance, and that performance-related pay holds a better promise.

These are interesting results that are not entirely consistent with previous research on the effects of national pay scales by Caroline Propper and Jack Britton from 2012, which finds that if teacher salaries are low relative to salaries in other sectors in the area, pupils' test scores will suffer. The idea is that if wages in other sectors are higher than in teaching, it is less likely that high-ability individuals will go into teaching. Consequently, pupil performance will be lower.

The differences might depend on various issues. For example, it cannot be ruled out that stronger methodology explains Greaves and Sibieta's results. Another difference is that these authors analyse primary school teachers, whereas Propper and Britton analyse secondary-school teachers who might respond differently to pay differences. Most importantly, however, the papers may very well identify different effects. Since they focus on the impact of differences between teacher wages and wages in other sectors, Propper and Britton are focusing on occupational choices – with more high-ability individuals going into teaching in areas where alternative occupations do not pay more – whereas Greaves and Sibieta results probably can tell us more about sorting across communities of existing teachers. (Of course, it may also simply be that the 5% higher salary is not sufficient to induce any sorting.)

However, it is also notable that Propper and Britton do not find any positive effects of teachers being paid *more* relative to other sectors. This indicates that teacher salaries could actually be lowered in some areas without harming pupil achievement. In other words, it makes more sense to differentiate teacher wages, and pay some more than others, rather than increase them across the board.

Similarly, Greaves and Sibieta's research indicates that the solution to increase teacher quality is not merely to raise salaries for all teachers. Instead, it is probably better to enable larger salary differentials – which means entirely abolishing national pay scales – so that we can reward productive teachers more than we reward non-productive ones.

Effects of Policy and Practice – Developed World

Football to Improve Math and Reading Performance

Education Economics (Online, 2014)

(<http://www.tandfonline.com/doi/abs/10.1080/09645292.2014.882293?journalCode=cede20#.U5tAs6jra7A>)

(http://www.tierweb.nl/assets/files/UM/TIER_WP%2012-07%20pdf.pdf)

By: Chris Van Klaveren and Kristof De Witte

Schools frequently increase the instructional time to improve primary school children's maths and reading skills. There is, however, little evidence that maths and reading skills are effectively improved by these instruction-time increases. This study evaluates 'Playing for Success' (PfS), an extended school day programme for underachieving pupils that uses the football environment as a motivating force. Primary school pupils with low motivation and self-esteem are offered practical and sports-related teaching content for 30 additional hours. The evaluation results of a randomised experiment suggest that PfS does not significantly improve math and reading performance of primary school students.

Contexts Matter: Selection in Means-Tested School Voucher Programs

Educational Evaluation and Policy Analysis (June 2014)

(<http://epa.sagepub.com/content/36/2/186>)

(<https://www.stepupforstudents.org/docs/default-source/independent-studies/selection-in-means-tested-school-voucher-programs-2012.pdf?sfvrsn=2>)

By: Cassandra M. D. Hart

This study examines public school characteristics, and public and private school market characteristics, associated with participation among elementary-aged students in a means-tested school voucher program in Florida. Participants are more likely than eligible nonparticipants to come from disadvantaged public schools on multiple dimensions. On average, participants' public schools have lower aggregate student achievement, and higher rates of disciplinary incidents. Participants' schools receive less positive ratings on various measures from principals and teachers. Participants face more competitive private school markets, and less competitive public school markets, than do nonparticipants. When these factors are considered together, the mean achievement and disciplinary incident rate of students' own public schools, as well as public and private school market variables, independently predict voucher use.

Do Choice Schools Break the Link Between Public Schools and Property Values? Evidence from House Prices in New York City

Working Paper

(http://repec.umb.edu/RePEc/files/2014_03.pdf)

By: Amy Ellen Schwartz, Ioan Voicu, and Keren Mertens Horn

There has been much research on the impact of school choice on pupil attainment. There has been less work on the effect of choice on housing markets, despite the fact that there is strong theoretical and empirical evidence of the impact of schools on housing prices. If choice decreases the link between school quality and house prices, it has the potential to decrease residential segregation. This paper explores the impact of school choice on the link between quality of local schools and house prices. The authors find that the proximity of alternative school choices decreases the relationship between local school quality and house prices. When one choice school opens, the impact of school quality on house prices falls by about 50% when the author holds constant the impact of pupil composition. They also find some evidence that choice schools have a positive direct impact on house prices, but this is not robust.

Money, Mentoring, and Making Friends: The Impact of a Multidimensional Access Program on Student Performance

Economics of Education Review (Volume 40, June 2014)

(<http://www.sciencedirect.com/science/article/pii/S0272775714000314>)

(www.ifs.org.uk/wps/wp1012.pdf)

This study evaluates a comprehensive university access program in Ireland that provides financial, academic and social support to low socioeconomic students, using a natural experiment that exploits the time variation in the expansion of the program across high schools. Overall, the authors find positive treatment effects on first year exam performance, dropout rates, and final graduation outcomes. They find similar results for access students entering through the standard admissions system and those entering with grade concessions. This suggests that access programs can be effective at improving academic outcomes for socio-economically disadvantaged students.

School Choice and Student Wellbeing

(<http://www.sciencedirect.com/science/article/pii/S0272775713001623>)

(<http://2011.economicsofeducation.com/malaga2011/mancebon.pdf>)

By: Colin P. Green, Maria Navarro-Paniagua, Domingo P. Ximénez-de-Embún, and Maria-Jesús Mancebón

The debate over private versus public provision of schooling remains contentious. A large literature has developed focusing on the relative educational performance of different school types. Beyond these important outcomes, variations in schooling may have direct effects on students' contemporaneous welfare. For instance, private schools may generate better performance by requiring greater effort from students and exerting more pressure upon them. This paper uses data from three Spanish regions to examine how private schooling affects one domain of student wellbeing, satisfaction with education. While naïve estimates suggest a positive effect of private schooling on student satisfaction. These effects disappear, and even turn negative, after introducing controls for school quality and/or taking into account that pupils in private schools differ systematically from those in public schools. This suggests that while private schools may generate better educational outcomes, they do not necessarily maximise, and may even reduce, adolescents' contemporaneous welfare.

Effects of Policy and Practice – Developing World

Do Children Spend Too Much Time in Schools? Evidence from a Longer School Year in Indonesia

Economics of Education Review (Vol. 41, August 2014)

By: Rasyad A. Parindur

(<http://www.sciencedirect.com/science/article/pii/S0272775714000521>)

(http://mpra.ub.uni-muenchen.de/46158/1/MPRA_paper_46158.pdf)

The author examines the effects of a longer school year in Indonesia on grade repetition, educational attainment, employability, and earnings. He utilises an arbitrary rule that assigned students to a longer school year in Indonesia in 1978–1979, which fits a fuzzy regression discontinuity design. This means that he can separate causation from correlation. He finds the longer school year decreases the probability of grade repetition and increases educational attainment; it also increases the probability of working in formal sectors and wages later in life. These results suggest the length of school years in Indonesia is not too long.

Continuing to Exercise Choice after Selecting a School: Insights into Parent-Decision Making in Local Education Markets in Nepal

(<http://www.sciencedirect.com/science/article/pii/S0738059314000030>)

(<http://works.bepress.com/cgi/viewcontent.cgi?article=1003&context=pjoshi>)

This paper analyses how parents continue to engage with schooling after their initial selection, using parent survey and focus group data collected in two urbanized districts in Nepal in 2011. The author finds substantial heterogeneity within and between public and private schools in parental participation. In particular, the parents who chose smaller private schools had stronger engagement with the school and their children, were more likely to voice their concerns, and consequently were more satisfied. In contrast, parents in below average public schools were more likely to express dissatisfaction but had limited interactions with schools to remedy their concerns.

General Education

Discrimination against Students with Foreign Backgrounds: Evidence from Grading in Swedish Public High Schools

Education Economics (DOI: 10.1080/09645292.2014.899562, 2014)

(<http://www.tandfonline.com/doi/full/10.1080/09645292.2014.899562#.U5svI6jra7A>)

(<http://swopec.hhs.se/hastef/papers/hastef0733.pdf>)

By: Björn Tyrefors Hinnerich, Erik Höglin, and Magnus Johannesson

The authors rigorously test for discrimination against students with foreign backgrounds in high school grading in Sweden. They analyse a random sample of national tests in the Swedish language graded both non-blindly by the student's own teacher and blindly without any identifying information. The increase in the test score due to non-blind grading is significantly higher for students with a Swedish background. This discrimination effect is sizeable, about 10% of the mean or 20% of the standard deviation of the blind test score.

Reading to Young Children: A Head-start in Life?

Economics of Education Review (Volume 40, June 2014)

(<http://www.sciencedirect.com/science/article/pii/S0272775714000156>)

(<ftp.iza.org/dp7416.pdf>)

By: Guyonne Kelb and Jan C. van Ours

This paper investigates the importance of parents reading to their young children. Using Australian data, the authors find that parental reading to children at age 4–5 has positive and significant effects on reading skills and cognitive skills (including numeracy skills) of these children at least up to age 10 or 11. The effects on skills more closely related to reading and language are larger than those on skills such as numeracy. However, all findings in relation to reading and other cognitive skills are persistent and robust to a wide range of sensitivity analyses. Although reading to children is also correlated with children's non-cognitive skills, there is no causal effect on this measure.