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Editor's Pick

Report Cards: The Impact of Providing School and Child Test Scores on Educational Markets

By: Tahir Andrabi, Jishnu Das, and Asim Ijaz Khwaja

American Economic Review (June 2017)

[Published version \(free\)](#)

It is widely acknowledged that the effects of education markets are likely to hinge on the availability of relevant information about school quality. Having access to information allows parents and other stakeholders to hold schools accountable to their performance; since education markets are often characterised by considerable information asymmetries, interventions to ensure access to school quality information are likely to be important for their functioning.

However, prior evidence has been hampered by the lack of random variation in information provision at the market level. Access to information is not random and may be partly an effect rather than cause of how the education market functions. While some research suggests that information makes a difference at the individual level, we know little of how entire markets respond to changes in the information supply.

In this paper, the authors provide rigorous and fascinating new evidence in this respect. Studying a market-level experiment that increased information randomly in 56 out of 112 villages in Pakistan – through the dissemination of report cards with school- and pupil-level test scores covering all schools in each village – allows them to analyse changes in fees and test scores in markets characterised by both public and fee-paying private schools. Since very few children attend schools outside their villages, each village represents a separate market.

The findings support the idea that information interventions, which are generally cheap, can improve the functioning of education markets in a very cost-effective way. Parents' perceptions of school quality became better aligned with test scores following the intervention – and, on average, after two-three years of treatment, pupil test scores had improved by the equivalent of 11 PISA points, equivalent to a 42 per cent gain relative to the control villages. Also, the intervention decreased private-school fees by 17 per cent – and increased overall enrolment by 3 percentage points – compared with the control villages.

The fact that fees declined, despite improvements in quality, suggests that better information decreased the price-quality gradient, as consumers became more aware of the relative differences between different schools. Indeed, the authors find evidence for this hypothesis.

In general, the effects on quality are primarily present among low-performing schools, especially private ones. Also, the effects on both quality and prices are stronger in private schools in more competitive villages, while there is no differential impact among government schools in this respect, suggesting that private schools are more sensitive to competition than government ones.

Another interesting finding is that low-performing private schools were more likely to close in treated villages. However, low-performing government schools did not close to a higher extent due to the information intervention. In other words, private-school supply appears to be much faster to react to shifting demand than government-school supply.

What are the mechanisms behind these findings? The authors find little evidence that households change their investments in terms of time and money – with the striking exception that parent-school interactions increased markedly. This may perhaps explain that some positive effects are present also among government schools, which face fewer incentives to improve than private schools. In general, since both fees and quality changed, the primary mechanisms behind the effects appear to be altered school behaviour and investments.

Overall, the paper therefore indicates that information supply matters greatly for the functioning of education markets. Certainly, it is important to acknowledge that the intervention only concerned report cards with raw test scores, rather than more sophisticated measures of school value-added. In most developed countries, raw test scores are already available through public sources, although these sources could be made more visible to parents. Still, while the external validity outside of the developing world may be somewhat limited, it indicates at the very least the importance of similar experiments in England and other developed countries – in which other, more sophisticated, measures could also be tested.



Effects of Policy and Practice – Developed World

Labour Market Frictions and Production Efficiency in Public Schools

By: Dongwoo Kim, Cory Koedel, Shawn Ni, and Michael Pogdursky

Economics of Education Review (October 2017).

[Published version](#)

[Working paper version \(free\)](#)

State-specific licensing policies and pension plans create mobility costs for educators who cross state lines. The authors empirically test whether these costs affect production in schools – a hypothesis that follows directly from economic theory on labour frictions – using geocoded data on school locations and state boundaries. They find that achievement is lower in mathematics, and to a lesser extent in reading, at schools that are more exposed to state boundaries. A detailed investigation of the selection of schools into boundary regions yields no indication of systematic differences between boundary and non-boundary schools along other measured dimensions. Moreover, the authors show that cross-district labour frictions do not explain state boundary effects. The findings are consistent with the hypothesis that mobility frictions in educator labour markets near state boundaries lower student achievement.

Using Goals to Motivate College Students: Theory and Evidence from Field Experiments

By: Damon Clark, David Gill, Victoria Prowse, and Mark Rush

NBER Working Paper No. 23638

[Published version](#)

[Working paper version \(free\)](#)

Will college students who set goals for themselves work harder and achieve better outcomes? In theory, setting goals can help present-biased students to mitigate their self-control problem. In practice, there is little credible evidence on the causal effects of goal setting for college students. The authors report the results of two field experiments that involved almost four thousand college students in total. One experiment asked treated students to set goals for performance in the course; the other asked treated students to set goals for a

particular task (completing online practice exams). Task-based goals had large and robust positive effects on the level of task completion, and task-based goals also increased course performance. Further analysis indicates that the increase in task completion induced by setting task-based goals caused the increase in course performance. The authors also find that performance-based goals had positive but small effects on course performance. They use theory that builds on present bias and loss aversion to interpret our results. Since task-based goal setting is low-cost, scalable and logistically simple, they conclude that our findings have important implications for educational practice and future research.

School Starting Age and Cognitive Development

By: Elizabeth Dhuey, David Figlio, Krzysztof Karbownik, and Jeffrey Roth

NBER Working Paper No. 23660

[Published version](#)

[Working paper version \(free\)](#)

The authors present evidence of a positive relationship between school starting age and children's cognitive development from age 6 to 15 using a regression discontinuity design and large-scale population-level birth and school data from the state of Florida. They estimate effects of being relatively old for grade (being born in September versus August) that are remarkably stable – always just around 0.2 SD difference in test scores – across a wide range of heterogeneous groups, based on maternal education, poverty at birth, race/ethnicity, birth weight, gestational age, and school quality. While the September-August difference in kindergarten readiness is dramatically different by subgroup, by the time students take their first exams, the heterogeneity in estimated effects effectively disappears. The authors document substantial variation in compensatory behaviours targeted towards young for grade children. While the more affluent families tend to redshirt their children, young for grade children from less affluent families are more likely to be retained in grades prior to testing. School district practices regarding retention and redshirting are correlated with improved outcomes for the groups less likely to use those remediation approaches (i.e., retention in the case of more-affluent families and redshirting in the case of less-affluent families.) They also study college and juvenile detention outcomes using administrative data from a large Florida school district, and show that being an older age at school entry increases children's college attainment and reduces the likelihood of being incarcerated for juvenile crime.



Effects of Policy and Practice – Developing World

Educational Impacts and Cost-Effectiveness of Conditional Cash Transfer Programs in Developing Countries: A Meta-Analysis

By: Sandra Garcia and Juan E. Savvedra

Review of Educational Research (forthcoming)

[Published version](#)

[Working paper version \(free\)](#)

The authors meta-analyse for impact and cost-effectiveness 94 studies from 47 conditional cash transfer programs in low- and middle-income countries worldwide, focusing on educational outcomes that include enrolment, attendance, dropout, and school completion. To conceptually guide and interpret the empirical findings of our meta-analysis, they present a simple economic framework on household decision making that generates predictions, all else constant, for the association between certain program context and design characteristics and impact estimates. They also present a simple model for the analysis of program costs, using it to compute cost-effectiveness estimates for a subsample of programs. For all schooling outcomes, they find strong support for heterogeneity in impact, transfer-effectiveness, and cost-effectiveness estimates. The meta-analytic results of impact and transfer-effectiveness estimates provide support to some – but not all – of the predictions from the household decision-making model.

Short-term Impacts of an Unconditional Cash Transfer Program on Child Schooling: Experimental Evidence from Malawi

By: Kelly Kilburn, Sudhanshu Handa, Gustavo Angeles, Peter Mvula, and Maxton Tsoka

Economics of Education Review (August 2017)

[Published version](#)

[Working paper slides \(free\)](#)

This study analyses the impact of a positive income shock on child schooling outcomes using experimental data from an unconditional cash transfer program in Malawi. Since households receive the cash and parents are responsible for making spending decisions, the authors also examine the intervening pathways between cash transfers and child schooling. Data comes from a cluster-

randomised study of Malawi's Social Cash Transfer Program (SCTP). After a baseline survey, households in village clusters were randomly assigned to treatment and control arms with treatment villages receiving transfers immediately and control villages assigned a later entry. The authors test for treatment impacts on a panel of school-aged children (6–17) using a differences-in-differences model. After a years' worth of transfers, we find the Malawi SCTP both improves enrolment rates and decreases dropouts. The main intervening pathway between the program and schooling is education expenditures, suggesting that the cash improves the demand for education by reducing financial constraints.



General Education

Unwelcome Guests? The Effects of Refugees on the Educational Outcomes of Incumbent Students

By: David Figlio and Umut Özek

NBER Working Paper No. 23661

[Published version](#)

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The world is experiencing the second largest refugee crisis in a century, and one of the major points of contention involves the possible adverse effects of incoming refugees on host communities. The authors examine the effects of a large refugee influx into Florida public schools following the Haitian earthquake of 2010 using unique matched birth and schooling records. They find precise zero estimated effects of refugees on the educational outcomes of incumbent students in the year of the earthquake or in the two years that follow, regardless of the socioeconomic status, grade level, ethnicity, or birthplace of incumbent students.

Foetal Malnutrition and Academic Success: Evidence from Muslim Immigrants in Denmark

By: Jane Greve, Marie Louise Schultz-Nielsen, and Erdal Tekin

Economics of Education Review (October 2017)

[Published version](#)

[Working paper version \(free\)](#)

This paper examines the impact of potential foetal malnutrition on the academic test scores of Muslim students in Denmark. The authors account for the endogeneity of foetal malnutrition by using exposure to the month of Ramadan as a natural experiment under the assumption that mothers of some of the Muslim students might have fasted during Ramadan when they were pregnant. They also complement our Muslim sample with a control group comprised of immigrant children from predominantly non-Muslim countries in a difference-in-differences framework. The outcome measures are the standardised test scores from the national exams on the subjects of Danish, English, Mathematics, and Science administered by the Danish Ministry of Education. The results indicate

that foetal exposure to Ramadan is likely to have a negative impact on the achievement scores of Muslim students, especially among females. Their analysis further reveals that the estimated relationship is stronger among children with a relatively low socio-economic background. The findings lend support for the importance of interventions designed to assist economically disadvantaged women during pregnancy.