# International Initiative for Impact Evaluation



EQ briefs analyze current policy issues and developments related to impact evaluation to help policy makers and development practitioners improve development impact through better evidence.

Number 15 **July 2010** 

# Education for all: How to pass the 2015 grade?



© Shehzad Noorani, 2002 / World Bank

# Overview

Conditional cash transfers, exemption of school fees and school feeding programmes have generally been found to have a positive impact on primary school enrolment rates. But these programmes have had a limited and a varied effect in different contexts on keeping children in education. Getting more children into schools is not very helpful if the quality of education is poor, children do not attend school regularly and drop out eventually. And we need more clarity on what works and in which context, to ensure 'Education for All'.

Keywords: primary school enrolment, completion, learning outcomes

## Mind the development gaps

Lack of education is one of the many dimensions of poverty. Achieving universal primary education is not only a goal in itself but also a contributing factor to achieve other development goals, such as a reduced rate of HIV/AIDS, better resource management, lower poverty and inequality and sustained economic growth <u>Bruns et al.</u> 2003). Despite progress towards universal primary education, 75 million children are still not enrolled in primary school, over a third of children drop out before completing primary school, and many more leave having failed <u>(UNESCO, 2009)</u>.

Although school enrolment has increased, low completion rates remain a problem. Many children drop out before finishing the fifth grade. For example, although access in many Latin American countries is near universal, completion rates are low because of high drop-out and repetition rates. Only 51 percent of children in Africa complete primary school. Low enrolment, high levels of drop-out and repetition rates combine to contribute to low educational attainment (Birdsall et al., 2005). Research suggests that a minimum five to six years of schooling is needed for the positive effects of schooling to be realised. Therefore, improving school retention and transition rates, in addition to primary school enrolment, is important (Bruns et al., 2003).

Failure to complete is a particular problem for children in poor families, trapping them in poverty: in India, 61 percent of the children who never complete fifth grade come from the poorest 40 percent of households (<u>Birdsall et al., 2005</u>). A number of interventions to increase enrolment, retention and transition rates in primary schools, particularly amongst this group, have been implemented. But have they been effective? Is there a particular intervention which is better than the others, in terms of improving enrolment, retention and transition rates? What is the most cost-effective intervention?

#### **Lessons learned**

There are a number of high quality evaluations of conditional cash transfer (CCT) programmes designed to improve primary education, but few impact evaluations exist of other kinds of interventions.

Conditional Cash Transfer (CCT) programmes improve school enrolment, while evidence on attendance is more mixed: Evaluations of Mexico's Progresa CCT programme, which provides cash transfer to poor households conditional to school attendance and access to health care, show that it led to higher levels of enrolment; less grade repetition and better transition rates; lower drop-out rates and higher re-entry rates for those who dropped out; and reduced drop outs in the transition from primary school to secondary school (Behrman et al., 2001; Dubois et al., 2003; Schultz, 2004). The programme was also found to be effective in protecting children's education in the event of unexpected events or shocks, such as illness, unemployment and natural disasters (Janvry et al., 2006).

Similar impacts have been found in other countries. Nicaragua's *Red de Proteccion Social* significantly increased school enrolment among children between 7 to 13 years who were returning to 3<sup>rd</sup> and 4<sup>th</sup> grades. In areas where children received the programme, the increase in enrolment was 17.7 percentage points higher than in areas not covered by the intervention. In 2002, the enrolment rate reached 92.7 percent, from a baseline of 68.3 percent in 2000. The gains were due to new enrolments amongst younger children and older children who returned to school. The programme also led to improved retention rates by 6.5 percent on average, and the largest impacts tended to be on children from the poorer households (Maluccio and Flores, 2004).

However, a review of six CCT programmes found that while most interventions have a positive effect on enrolment rates, their impact on attendance is more mixed (Rawlings and Rubio, 2005). In Mexico and Colombia, CCTs led to little change in school attendance (Schultz 2000; Attanasio et al., 2005), while in Jamaica the CCT Programme of Advancement Through Health and Education (PATH) improved attendance by more than half a day over a 20 day period (Levy and Ohls, 2007). In Brazil, the Program for the Eradication of Child Labour (PETI), which is conditional on children not working and attending school, showed that school attendance increases as a result of CCTs (Pianto and Soares, 2004).

It is not clear why CCTs appear to have a more mixed impact on attendance, although in the case of both Colombia and Jamaica the programmes were implemented in contexts with already high attendance rates, which partly explains the limited effect on attendance (Attanasio et al., 2005; Levy and Ohls, 2007).

While many evaluations have shown positive impacts of CCTs and other subsidy programmes, such interventions

may not work well in areas where administrative capacity and the supply of education facilities is limited.

Exemption from primary school fees increases enrolment rates, but quality of education can be adversely affected: Several countries eliminated school fees for primary education in an effort to achieve universal primary education. Although school enrolment increased substantially following the elimination of fees in Malawi (1994), Uganda (1997), Tanzania (2000), and Cameroon, Ghana, Burundi, Rwanda and Kenya (2003), there are only a few rigorous quantitative impact evaluations of these policies, and these have focused on Uganda.

Three impact evaluations of primary school fees exemption in Uganda found that it increased primary school enrolment and attendance significantly, particularly amongst poor families in rural areas (Deininger, 2003; Grogan, 2009; Nishimura et al, 2003). However, two of these studies found that this sudden increase in enrolment led to high student - teacher ratios and over-crowded classes. Evidence also shows low pass rates in the final primary school examinations in Uganda in 1999 with only three guarters passing the test (Deininger, 2003). This finding illustrates the possible counter-productive impacts of the policy to eliminate school fees. However, the lack of comparative data makes it difficult to attribute the low pass rate in the examination to this policy. A more recent regression study looking at the effect of socio-economic status on examination results suggests that those who were in school anyway did not perform worse (IOB, 2008). Thus, the apparent worsening of examination results was not due to everyone performing worse, but because broader school intake and characteristics of the student population.

Another evaluation of the same programme (Nishimura et al., 2003) found that the intervention had a positive impact on access to education among the poor. However, while their results suggest the programme also improved completion rates, this effect was only significant for girls up to the 5<sup>th</sup> grade and boys up to the 4<sup>th</sup> grade. Girls' completion rates increased by 12 percentage points and boys' by 7.2 percentage points, although repetition in the same grade persisted.

School feeding programmes encourage better attendance and lower drop-out rates but the evidence on enrolment is weak: A systematic review on the effectiveness of school feeding programmes synthesised results from nine impact evaluations from low income countries (Kristjansson et al., 2006). Results from two of the included studies that measured impact on attendance showed that the school feeding programmes improved attendance by 4 to 6 days per year per child.

Tel: +91 11 26139494 | www.3ieimpact.org

An evaluation of a primary school breakfast programme in Peru found a lower drop out and better attendance rates amongst those receiving it, but no effect on primary school enrolment (<u>Cueto and Chinen, 2008</u>). The results also showed that children who received the programme spent less time in the classroom due to teachers having to spend time organising for the breakfast.

An evaluation of the 'Food for Education Programme' in Bangladesh - a 'conditional food programme' providing poor households with free monthly food rations if their children attended primary school- suggested that children were 8.4 percent more likely to go to school as a result of the intervention and that enrolment increased by 35 percent. The study also showed that attendance was 12 percentage points higher, and the drop-out rate was 9 percentage points lower than in non-programme schools. However, increased enrolment affected quality of education with high student-teacher ratios, overcrowded classes and lower test scores – and all this was also dependant on the facilities the schools had, such as trained teachers (Ahmed and del Ninno, 2002).

While there are other evaluations of school feeding programmes, these are either methodologically weak or do not specifically examine primary education (such as, <u>Babu and Hallam, 1989; Vermeersch, 2002</u>).

Decentralisation helps to improve enrolment but this may not be directly linked: Decentralisation of delivery of basic services in Ethiopia seemed to increase primary school enrolment and narrow the gaps between lagging and better off regions, with enrolments catching up in the former (Garcia and Rajkumar, 2008). But it may be difficult to attribute any improvement directly to decentralisation because the decentralisation policy was part of various other government policies and actions.

Similarly another study which examined the effects of decentralisation of education on the distribution of educational expenditure in China, the Philippines and Indonesia, found that it led to both positive and negative effects. In China, for example, while on average the perstudent budgeted spending in real terms rose by 9.6 percent at the primary level, educational spending as a share of total government spending fell. It also widened the inter-provincial disparities particularly for primary education. But in this study too, it was difficult to isolate the impacts of decentralisation from other changes in education and economic policy (King and Guerra, 2005).

Overall, there are very few high quality quantitative evaluations looking at the impact of decentralisation of education on primary school enrolment, retention and transition rates and most existing studies make only tentative conclusions.

help School health programmes improve attendance, but there is little evidence on Most evaluations of school health enrolment: programmes assess their impact on attendance, but do not look at enrolment, retention, transition or completion rates (such as, <u>Borbonis et al., 2006</u>; <u>Miguel</u> and Kremer, 2004). For example, the study on a school based programme involving mass de-worming treatment in Kenya showed higher participation rates -a onequarter reduction of absenteeism - particularly amongst youngest children (Miguel and Kremer 2004), but includes no information on enrolment.

In China, the Rural Education Action Project (REAP) assessed the impact of two different anaemia reduction interventions in Shaanxi Province - one providing children with daily doses of multi-vitamins combined with iron and the other providing information and advise to children's parents regarding their child's nutritional status (Yu et al., 2009). Providing children with vitamin supplements had a positive impact on reduction of anaemia and on test scores but the second intervention showed little effect on children's level of anaemia and learning. However, this study did not measure effects on school attendance rates. An ongoing 3ie funded study will examine the impact of incentives to school principals in China's rural primary schools in combating anaemia.

Better quality education could improve school enrolments, but more evidence is needed: Many evaluations of school quality examine the impact of quality improvements on learning outcomes and test scores. Although there are studies which indicate that better quality education can improve enrolment (for example, Handa, 2002; Lavy, 1996; Lloyd et al, 2000; White, 2004), there have been no rigorous impact evaluations looking specifically at enrolment, retention or transition rates.

School enrolments in Ghana increased by 12 percent between 1988 and 2003, with 4 percent attributable to improved school facilities, including reduced distance to school. Factors such as student- teacher ratio, adequate number of classrooms and availability of materials such as chalk and desks are important determinants of school enrolment and retention (White. 2004).

# Closing the evaluation gap

School enrolment rates seem to improve with most interventions reported here, but this is not enough. For education to have a more sustainable effect on children, the quality of schools needs to improve. Information on cost-effectiveness of primary education interventions is lacking. Overall, policy makers need evidence on the cost effectiveness of different types of education interventions to determine which programmes are most effective and in which area they should invest more

money.

The effectiveness of CCTs has been established. But why and how have these programmes been successful in improving enrolment, retention and transition rates? And in which contexts are this type of programme appropriate? Despite various studies on CCTs, information on this is still lacking. Evaluations, particularly those using mixed methods and theory based evaluation, would help further understanding of the role of institutional and administrative capacity with respect to CCTs. They can also generate contextual information about the links between an intervention and its effect (White, 2009).

There is not enough conclusive evidence to determine the effectiveness of other types of interventions such as school feeding, school based health programmes, decentralisation, school fees exemption or improved school quality. There is certainly a need for more high quality impact evaluations of these interventions, if these are to inform policy decisions around achieving 'Education for all by 2015', particularly good quality education that is sustainable.

#### Notes

<sup>1</sup> Decentralisation initiatives involving local school management, including the setting up of school based management committees and parental participation will be covered in another brief.

### References

Attanasio, O., Battistin, E., Fitzsimons, E., Mesnard, A. and Vera-Hernandez, M. (2005), 'How Effective are Conditional Cash Transfers? Evidence from Colombia', Briefing Note 54, Institute for Fiscal Studies. http://www.ifs.org.uk/bns/bn54.pdf

Ahmed, A. U. and del Ninno, C. (2002), 'The Food for Education Programme in Bangladesh: An Evaluation of its Impact on Educational Attainment and Food Security', Washington D. C.: International Food Policy Research Institute (PDF).

www.ifpri.org/sites/default/files/publications/fcndp138.pdf

Babu, S. and Hallam, J. A. (1989), 'Socio-economic impacts of school feeding programmes – Empirical evidence from a South Indian village, Food Policy, Vol. 14, No. 1, pp. 58-66. <a href="http://tinyurl.com/277i6rg">http://tinyurl.com/277i6rg</a>

Behrman, J., Sengupta, P. and Todd, P. (2001), 'Progress through PROGRESA: an impact assessment of a school subsidy experiment in rural Mexico', Washington D. C.: International Food Policy Research Institute.

http://athena.sas.upenn.edu/~petra/papers/trans18.pdf

Birdsall, N., Levine, R. and Ibrahim, A. (2005), 'Toward universal primary education: investments, incentives and

institutions', UN Millennium Project Task Force on Education and Gender Equality, London: Earthscan. (PDF)
<a href="https://www.unmillenniumproject.org/documents/Education-complete.pdf">www.unmillenniumproject.org/documents/Education-complete.pdf</a>

Borbonis, G. J., Miguel, E. and Puri-Sharma, C. (2006), 'Anemia and School Participation', The Journal of Human Resources, Vol. XLI, No. 4, pp. 692-721. <a href="http://www.ssc.wisc.edu/jhr/2006ab/bobonis4.htm">http://www.ssc.wisc.edu/jhr/2006ab/bobonis4.htm</a>

Bourguignon, F., Ferreira, F. H. G. and Leite, P. G. (2003), 'Conditional Cash Transfers, Schooling, and Child Labour', The World Bank Economic Review, Vol. 17, No. 2, pp. 229, 254. http://www.delta.ens.fr/abstracts/wp200307.pdf

Bruns, B., Mingat, A. and Rakotomalala, R. (2003), 'Achieving Universal Primary Education by 2015 – A Chance for Every Child', Washington D. C.: World Bank. (PDF) <a href="http://siteresources.worldbank.org/EDUCATION/Resources/278200-1089739404514/achieving\_efa\_full.pdf">http://siteresources.worldbank.org/EDUCATION/Resources/278200-1089739404514/achieving\_efa\_full.pdf</a>

Cueto, S. and Chinen, M. (2008), 'Educational impact of a school breakfast programme in rural Peru', International Journal of Educational Development, Vol. 28, Issue 2, pp. 132-148. http://tinyurl.com/23lq46m

Deininger, K. (2003), 'Does cost of schooling effect enrolment by the poor? Universal primary education in Uganda', Economics of Education Review, Vol. 22, pp. 291-305. <a href="http://www.sciencedirect.com/science?">http://www.sciencedirect.com/science?</a> ob=ArticleURL& udi=B6VB9-4834GB0-

3& user=10& coverDate=06%2F30%2F2003& rdoc=1& fmt = high& orig=search& sort=d& docanchor=&view=c& acct= C000050221& version=1& urlVersion=0& userid=10&md5=0 1f3d4608463a794d1947f9c0e50321f

de Janvry, A., Finan, F., Sadoulet, E. and Vakis, R. (2006), 'Can conditional cash transfer programmes serve as safety nets in keeping children at school and from working when exposed to shocks?', Journal of Development Economics, Vol. 79, pp. 349-373.

http://www.sciencedirect.com/science/article/B6VBV -4JG5FNX-2/2/b3e1e917196526266c250a9a9c498411

Dubois, P., de Janvry, D. and Sadoulet, E. (2003), 'Effects on School Enrollment and Performance of a Conditional Cash Transfer Programme in Mexico', Toulouse: University of Toulouse.

http://www2.toulouse.inra.fr/centre/esr/wpRePEc/dub200203.pdf

Fiszbein, A. and Schady, N. (2009), 'Conditional Cash Transfers: Reducing Present and Future Poverty', Washington D. C.: World Bank.

http://siteresources.worldbank.org/INTCCT/Resources/575760 8-1234228266004/PRR-CCT\_web\_noembargo.pdf

Garcia, M. and Rajkumar, A. S. (2008), 'Achieving Better Service Delivery Through Decentralization in Ethiopia', World Bank Working Paper 131, Africa Human Development Series, Washington D. C.: World Bank (PDF). <a href="http://tinyurl.com/yke8v38">http://tinyurl.com/yke8v38</a>

Glewwe, P. and Kassouf, A. L. (2008), 'The Impact of the Bolsa Escola/ Familia Conditional Cash Transfer on Enrollment, Grade

Promotion and Drop-out rates in Brazil', Paper by ANPEC -Associação Nacional dos Centros de Pósgraduação em Economia, Proceedings of the 36th Brazilian Economics Meeting. (PDF)

www.anpec.org.br/encontro2008/artigos/200807211140170-pdf

Glewwe, P. and Olinto, P. (2004), 'Evaluating the impact of Conditional Cash Transfers on Schooling: An Experimental Analysis of Honduras' PRAF Programme', Final report USAID. <a href="http://siteresources.worldbank.org/INTISPMA/Resources/383704-1109618370585/No168\_Glewwe\_04.pdf">http://siteresources.worldbank.org/INTISPMA/Resources/383704-1109618370585/No168\_Glewwe\_04.pdf</a>

Grogan, L. (2009), 'Universal Primary Education and School Entry in Uganda', Journal of African Economies, 18(2):183-211. <a href="http://jae.oxfordjournals.org/cgi/reprint/18/2/183">http://jae.oxfordjournals.org/cgi/reprint/18/2/183</a>

Handa, S. (2002), 'Raising primary school enrolment in developing countries: The relative impact of supply and demand', Journal of Development Economics, Vol. 69, Np. 1, pp. 103-128.

http://www.sciencedirect.com/science? ob=ArticleURL& udi=B 6VBV-46HFWXJ-

6& user=10& coverDate=10%2F01%2F2002& rdoc=1& fmt =high& orig=browse& sort=d&view=c& acct=C000050221& version=1& urlVersion=0& userid=10&md5=ddc96984bff3606 ee307ecd58d712a2f

IOB (2008), 'Primary Education in Uganda', IOB Impact Evaluation, No. 311, The Hague: IOB. http://www.oecd.org/dataoecd/9/7/41464402.pdf

King, E. M. and Guerra, S. C. (2005), 'Education Reforms in East Asia: Policy, process and impact', in World Bank (ed), 'East Asia Decentralizes – Making Local Government Work', Washington D. C.: World Bank (PDF). <a href="http://siteresources.worldbank.org/INTEAPDECEN/Resources/Chapter-9.pdf">http://siteresources.worldbank.org/INTEAPDECEN/Resources/Chapter-9.pdf</a>

Kristjansson, E.A., Robinson, V., Petticrew, M., MacDonald, B., Krasevec, J., Janzen, L., Greenhalgh, T., Wells, G., MacGowan, J., Farmer, A., Shea, B.J., Mayhew, A. and Tugwell P. (2006), 'School feeding for improving the physical and psychosocial health of disadvantaged students', *Campbell Systematic Reviews*, 2006:14, DOI: 10.4073/csr.2006.14. http://www.campbellcollaboration.org/lib/download/113/

Lavy, V. (1996), 'School supply constraints and children's educational outcomes in rural Ghana', Journal of Development Economics, Vol. 51, No. 2, pp. 291-314. <a href="http://www.sciencedirect.com/science/article/B6VBV">http://www.sciencedirect.com/science/article/B6VBV</a>

http://www.sciencedirect.com/science/article/B6VBV - 3VWC643-J/2/a24ce05bf83c0a10dfddf35b13d28e75

Levy, D. and Ohls, J. (2007), 'Evaluation of Jamaica's PATH Program: Final Report', Mathematica Policy Research, Washington, DC.

http://zunia.org/uploads/media/knowledge/Impact%20Evaluation%20Report%20by%20Mathematica%20(Final).pdf

Lloyd, C.B., Mench, B. and Clark, W. H. (2000), 'The Effects of Primary School Quality on School Dropout among Kenyan Girls and Boys', Comparative Education Review, Vol. 44, No. 2, pp. 113-147. <a href="http://www.istor.org/pss/1189253">http://www.istor.org/pss/1189253</a>

Maluccio, J. A. and Flores, R. (2004), 'Impact Evaluation of a Conditional Cash Transfer Programme: the Nicaraguan Red de Proteccion Social', FCND Discussion Paper No. 184, Washington D. C.: International Food Policy Research Institute. (PDF)

www.ifpri.org/sites/default/files/publications/fcndp184.pdf

Miguel, E. and Kremer, M. (2004), 'Worms: Identifying impacts on education and health in the presence of treatment externalities', Econometrica, Vol. 72, No. 1, pp. 159-217. <a href="http://www3.interscience.wiley.com/journal/118750108/abstract?CRETRY=1&SRETRY=0">http://www3.interscience.wiley.com/journal/118750108/abstract?CRETRY=1&SRETRY=0</a>

Nishimura, M., Yamano, T. and Sasaoka, Y. (2005), 'Impacts of the Universal Primary Education Policy on Educational Attainment and Private Costs in Rural Uganda', available from: <a href="http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202">https://www.ac.jp/~yamanota/UgandaUPE%20Oct%202</a> <a href="https://www.ac.jp/~yamanota/UgandaUPE%200">https://www.ac.jp/~yamanota/Ugand

Pianto, D.M, and Soares, S. (2004), 'Use of Survey Design for the Evaluation of Social Programs: The PNAD and the Program for the Eradication of Child Labor in Brazil' Proceedings of the 32th Brazilian Economics Meeting, Brazilian Association of Graduate Programs in Economics (PDF) www.anpec.org.br/encontro2004/artigos/A04A133.pdf

Ravallion, M. and Wodon, Q. T. (2000), 'Child Labor Displace Schooling? Evidence on Behavioral Responses to Enrollment Subsidy', The Economic Journal, Vol. 110, Issue 462, pp C158-C175.

http://ideas.repec.org/a/ecj/econjl/v110y2000i462pc158-75.html

Rawlings, L. B. and Rubio, G.M. (2005), 'Evaluating the Impact of Conditional Cash Transfer Programs', The World Bank Research Observer 2005 20(1):29-55.

http://wbro.oxfordjournals.org/cgi/content/abstract/20/1/29

REAP (n.d), 'Paying for Performance in the Battle Against Anemia in China', Research at REAP, available from: <a href="http://reap.stanford.edu/research/paying">http://reap.stanford.edu/research/paying</a> for performance in the battle against anemia in china/ - accessed 11/5-2010.

Reinikka, R. And Svensson, J. (2005), 'Fighting Corruption to Improve Schooling: Evidence from a Newspaper Campaign in Uganda', Journal of European Economic Association', Vol. 3, No. 2-3., pp. 1-9.

http://www.mitpressjournals.org/doi/abs/10.1162/jeea.2005.3. 2-3.259?journalCode=jeea

Schady, N. and Araujo, M. C. (2006), 'Cash transfers, conditions, school enrolment, and child work: Evidence from a randomized experiment in Ecuador', World Bank Policy Research Working Paper 3930, Impact Evaluation Series, No. 3.

http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=917501

Schultz, T.P., (2000). Impact of Progresa on School Attendance Rates in the Sampled Population. International Food Policy Research Institute, Washington, DC. <a href="http://ageconsearch.umn.edu/bitstream/16008/1/mi00sc02.pdf">http://ageconsearch.umn.edu/bitstream/16008/1/mi00sc02.pdf</a>

Schultz, T. P. (2004), 'School subsidies for the poor: evaluating the Mexican PROGRESA poverty programme', Journal of Development Economics, Vol. 74, No. 1, pp. 199-250. http://tinyurl.com/3302ekz

Skoufias, E. and Shapiro, J. (2006), Evaluating the Impact of Mexico's Quality Schools Programme: The Pitfalls of Using Non-Experimental Data', Impact Evaluation Series No. 8, World Bank Policy Research Working Paper 4036, Washington D. C.: World Bank (PDF). <a href="http://tinyurl.com/ylxr5he">http://tinyurl.com/ylxr5he</a>

Todd, P.E., and Wolpin, K.I. (2006). "Assessing the Impact of a School Subsidy Program in Mexico: Using a Social Experiment to Validate a Dynamic Behavioral Model of Child Schooling and Fertility." American Economic Review, 96(5): 1384–1417. http://www.istor.org/pss/30034980

UNESCO (2009), "Education For All – Global Monitoring Report" available from:

http://www.unesco.org/en/efareport/reports/2009-governance/

Vermeersch, C. (2002) 'School Meals, Educational Achievement, and School Competition: Evidence from a Randomized Experiment,' mimeo, Harvard University. http://www.nuff.ox.ac.uk/users/vermeersch/schoolmeals.pdf

WFP (2006), 'Food for Education Works – A review of WFP FFE programme monitoring and evaluation 2002-2006', Rome: World Food Programme.

http://www.schoolsandhealth.org/sites/ffe/Ke y%20Information/Food%20for%20Education%20Works%202006.pdf

White, H. (2004), 'Books, Buildings, and Learning Outcomes – An Impact Evaluation of World Bank Support To Basic Education in Ghana', Washington D. C.: World Bank. <a href="http://tinyurl.com/y99nlly">http://tinyurl.com/y99nlly</a>

White, H. (2009), 'Theory-based Impact Evaluation: Principles and Practice', Journal of Development Effectiveness, Vol. 1, No. 3, pp. 271-284.

http://www.3ieimpact.org/admin/pdfs\_papers/51.pdf

Yu, E., Cox, T., Kleiman-Weiner, M. and Lee, M. (2009), 'An Invisible Epidemic: Anemia in Rural China', Rural Education Action Project (REAP) Brief # 105, Stanford: REAP. http://iis-db.stanford.edu/pubs/22728/REAP105 ENweb.pdf

#### Credits

This brief was written by Birte Snilstveit with inputs from Howard White, Christelle Chapoy, Radhika Menon and edited by Shanti Mahendra.

© 3ie, 2010 - EQ briefs are published by the International Initiative for Impact Evaluation 3ie. EQ briefs are works in progress. We welcome comments and suggestions regarding topics for briefs and additional studies to be included in any EQs. Ideas and feedback should be sent to Christelle Chapoy at: cchapoy@3ieimpact.org

To subscribe, please email: bjoy@3ieimpact.org