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 8
May 2009

Getting girls into school: a development benefit for all

© Alan Gignoux, 2002 / World Bank

Overview

A disproportionate number of girls remain out of schools in many developing countries. Evidence shows there is a need for 'gender-targeted' programs. Such targeted programs may be financial incentives - which a number
have studies have found to be effective - or female-friendly schools, for which the evidence base is weak.

Overall, there is a need for more rigorous impact evaluations to find what is the most effective and cost-effective way of reducing gender inequalities in access to education.

Key words: Girl's education, school enrolment.

Mind the development gaps

Achieving gender equality in education by 2005 was the first "missed Millennium Development Goal". Continued failure to achieve that goal puts the other MDGs at risk as female education reduces fertility, child malnutrition and child mortality and promotes higher economic growth (Bruns et al., 2003; Herz, 2006; Klasen, 2002; Sen, 1999; Smith and Haddad, 1999).

Significant progress has been made towards global gender parity during recent years. Countries like Bangladesh and India have nearly reached gender parity in primary education (World Bank). However, girls still make up a disproportionate share of those missing out on education in many developing regions (UN, 2008). Almost 60 per cent of the 72 million children out of primary school are girls in the world today.

Lessons learned

How effective are 'gender neutral' policies in getting girl's into school?

Gender neutral interventions and policies can have a disproportionate positive impact on girls' education, but this cannot be guaranteed to be the case. For instance, interventions such as the elimination of school fees in Ghana (Deininger, 2003; Grogan, 2008; Nishimura et al., 2005), the school feeding programs in Bangladesh (Ahmed and del Ninno, 2002) and elsewhere (World Food Programme, 2006), or the distribution free school uniforms in Kenya (Evans and Kremer, 2005) have all mostly benefited to girls. In fact, education systems are not 'gender-neutral' and operate within a specific cultural framework, which explains partly why those interventions may decrease the initial bias.

3ie, Global Development Network, Second Floor, East Wing, ISID Complex, Plot No.4, Vasant Kunj Institutional Area, New Delhi 110 070
Tel: +91 11 26139494 | www.3ieimpact.org

However, such positive effect on girls from non-targeted programs is neither universal nor uncontested. In most cases, financial incentives such as the Conditional Cash Transfer programs (CCTs) have had mixed results in terms of closing the gender gap, though it led to higher school attendance rates and lower dropout and repetition rates overall.

In Mexico, the 'Progresa' flagship program of cash transfers in exchange for regular school attendance, health clinic visits and nutritional support had no significant effect on primary-school enrolment in rural areas and in urban areas. The enrolment rate for boys and girls is of over 90 per cent (Parker, 2005). However, in secondary school an average effect was found. The effects on enrolment were 9.2 percentage points for girls compared to 6.2 percentage points for boys (Schultz, 2004).

Another analysis of the Food for Education Program in Bangladesh found the effect on boys and girls was the same (Ravallion and Wodon, 2000). Evaluations of CCTs in other countries have not found large differences in impact across gender (Barrera-Osorio et al., 2008; Maluccio and Flores, 2004; Schady and Araujo, 2008). In contrast, the World Food Program survey covering 1 million pupils in over 4,000 schools in 32 countries claimed gender-differentiated impact, but its methodology has been critiqued.

Though these types of interventions are not the panacea, evidence shows that gender-neutral programs have benefited girls more than boys in certain settings.

What happens in gender-targeted programs?

Gender-targeted programs can be broadly classified into two groups: those offering financial inducements to parents, schools or the students themselves to stay in school, and programs making schools more 'female-friendly' by employing more women teachers, or providing separate sanitation facilities and additional support. If there are several evaluations of financial incentive programs showing a positive impact on girls' enrolment, there is little evidence regarding 'female-friendly' school interventions.

Overall, gender-targeted financial incentives are increasing girl's enrolment and school attendance:

- A merit scholarship programme for girls in primary schools in rural Kenya resulted in increasing both test scores and school attendance (Kremer et al, 2004).

- The Female Stipend Programme in Bangladesh aimed to increase secondary school enrolment and completion rates - as well as increasing age at marriage among girls in rural areas - by paying school fees plus a stipend to cover other costs, such as uniforms. Two rigorous evaluations have found a positive impact on girls' enrolments (Khandker et al, 2003; and Uwa, 2006).

- A CCT programme in Pakistan was also effective in increasing female enrolment in public secondary schools (Chaudhury and Parajuli, 2006).

- Another program in Pakistan encouraged NGOs to build schools, paying a subsidy for each girl enrolled. It was found that the enrolment of both girls and boys had increased as a result of the intervention including larger gains for girls. A pilot project looking at extending this programme to rural areas also found an increased enrolment of girls, but in some villages boys' enrolment had fell (Kim et al 1999b). However, the largest increases for girls were in villages where boys' enrolment had also increased.

- A scholarship programme targeting girls in rural Guatemala increased attendance and lowered drop-outs, but had no effect on completion rates (Liang and Marble, 1996). For Liang and Marble, this could be explained if the 'worse' students represent the core of the drop-outs.

- In Cambodia, a cash transfer programme showed that girls' enrolment and attendance at the participating schools increased by around 30 percentage points. Households received cash transfers on the condition that their daughter is enrolled in school, attends regularly and achieves a passing grade (Filmer and Schady, 2006).

- The Education Enhancement Programme in Egypt injected massive public investments in new schools, including in deprived rural areas, where girls' enrollment was traditionally quite low. The program made significant progress in raising the primary enrollment rate of girls and decreasing the enrollment gap with boys (Iqbal and Riad, 2004).

'Female-friendly' school interventions show little evidence of real impact:

- The first established segregated girls' community primary schools staffed by local female teachers in rural areas in Balochistan, Pakistan, and resulted in an increased girls' enrolment by 22 per cent and boys by 13 per cent (In Kim et al, 1998).

- The second was a program to provide menstrual cups to girls in Chitwan, Nepal, and showed a negligible impact on school attendance (0.5 days

a year on average), and none on grades despites some improvements in the girl's well-being (Oster and Thornton, 2009).

Closing the evaluation gap

Despite a wide range of interventions aiming to achieve gender parity in education, existing quantitative evaluations largely look at impacts of interventions providing financial incentives and are concentrated in a few countries. There are surprisingly few high quality quantitative evaluations of other interventions. As noted by Glick (2008), there is a range of literature on policy and strategies and a large number of assessments, but these are less formal and contain little rigorous statistical evidence (e.g.: Amin and Sedgh, 1998; Herz and Sperling, 2004; Phuyal et al., 2002; Raynor and Wesson, 2006; Sutherland-Addy, 2002; Sutherland-Addy, 2008; Tembon and Fort, 2008). There is also a range of studies using survey data and regression analysis to estimate determinants of school participation, rather than evaluations of specific interventions. While these studies are useful and can inform the design of policies and interventions, they don't give us empirical evidence on the effectiveness of specific interventions.

In general, there is a need for more rigorous impact evaluations to find what is the most effective and cost-effective way of reducing gender inequalities in access to education. The enduring questions to be addressed by evaluators and researchers are: What is effective in increasing school enrolment, participation and completion rates among girls in middle and low income countries? What is the local economic impact of girls' education?

References

Ahmed, A. U. and del Ninno, C. (2002), 'The Food for Education Program in Bangladesh: An Evaluation of its Impact on Educational Attainment and Food Security', Washington D. C.: International Food Policy Research Institute.
www.ifpri.org/divs/fcnd/dp/papers/fcndp138.pdf

Amin, S. and Sedgh, G. (1998),'Incentive Schemes for School Attendance in Rural Bangladesh', available from:
http://www.popcouncil.org/pdfs/wp/106.pdf (retrieved 20/1-09)

Barrera-Osorio, F., Bertrand, M., Linden, L. L. and Perez-Calle, F. (2008), 'Conditional Cash Transfers in Education: Design Features, Peer and Sibling Effects – Evidence from a Randomized Policy Experiment in Colombia', Policy Research Working Paper 4580, Washington D. C.: World Bank
http://www.nber.org/papers/w13890

Bruns, B., Mingat, A. and Rakotomalala, R. (2003), 'Achieving Universal Primary Education by 2015 – A Chance for Every Child', Washington D. C.: World Bank.

Chaudhury, N. and Parajuli, D. (2006),'Conditional Cash Transfers and Female Schooling: The Impact of the Female School Stipend Program on Public School Enrollments in Punjab, Pakistan', World Bank Research Working Paper 4102, Impact Evaluation Series No. 9, Washington D. C.: World Bank
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=953570

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.
http://ideas.repec.org/a/eee/ecoedu/v22y2003i3p291-305.html

Evans, D. and Kremer, M. (2005), 'The Impact of Distributing School Uniforms on Children's Education in Kenya', available from:
http://www.csae.ox.ac.uk/conferences/2008-EDiA/papers/297-Ngatia.pdf - retrieved 20/1-09.

Filmer, D. and Schady, N. (2006), 'Getting Girls Into School: Evidence from a Scholarship Program in Cambodia', Human Development Sector Reports, No. 38727-KH, Washington: World Bank. Available from:
http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2007/11/28/000158349_20071128084228/Rendered/PDF/wps3910.pdf

Fuwa, N. (2006), 'The Net Impact of the Female Secondary Stipend Program in Bangladesh', available from:
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=879245

Herz, B. (2006), 'Educating Girls in South Asia: Promising Approaches', Kathmandu: United Nations Children's Fund.
http://www.ungei.org/resources/index_709.html

Herz, B. and Sperling, G. B. (2004), 'What Works in Girls' Education – Evidence and Policies from the Developing World', New York: Council on Foreign Relations.
http://www.cfr.org/publication/6974/what_works_in_girls_education.html

Hill, M. A. and King, E. M. (1995), 'Women's education and economic well-being', Feminist Economics, Vol. 1, No. 2, pp. 21-46.
http://www.informaworld.com/smpp/content~content=a714042230~db=all

Glewwe, P., Maiga, E. and Zheng, H. (2007), 'The Contribution of Education to Economic Growth in Sub-Saharan Africa: A Review of the Evidence', St.Paul: Department of Applied Economics, University of Minnesota.

Glick, P. (2008), 'What Policies will Reduce Gender Schooling Gaps in Developing Countries: Evidence and Interpretation', World Development, Vol. 36, No. 9, pp. 1623-1646.

Grogan, L. (2008), 'Universal Primary Education and School Entry in Uganda', Journal of African Economies.
www.oxfordjournals.org/page/3426/5

Iqbal, F. and Riad, N. (2004), 'Increasing Girls' School Enrolment in the Arab Republic Of Egypt', Social and Economic Development Department, Washington D. C.: World Bank.
http://www.escwa.un.org/divisions/databases/ecwpubs/pub.asp?theme=Education&looka=1

Khandker, S. R., Pitt, M. M. and Fuwa, N. (2003), 'Subsidy to Promote Girls' Secondary Education: The Female Stipend Program in Rural Bangladesh', available from:
http://www.h.chibau.jp/mkt/revised%20fssap%20paper9b.pdf

Kim, J., Alderman, H. and Orazem, P. F. (1998), 'Can Cultural Barriers Be Overcome in Girls' Schooling?: The Community Support Program in Rural Balochistan', Working Paper Series on Impact

Evaluation of Education Reforms, Paper No. 10, Washington D. C.: World Bank.

Kim, J., Alderman, H. and Orazem, P. F. (1999a), 'Can Private School Subsidies Increase Enrollment for the Poor? The Quetta Urban Fellowship Program', The World Bank Economic Review, Vol. 13, No. 3, pp. 443-465. http://wber.oxfordjournals.org/cgi/content/abstract/13/3/443

Kim, J., Alderman, H. and Orazem, P. F. (1999b), 'Evaluation of the Balochistan Rural Girls' Fellowship Program – Will Rural Families Pay to Send Girls to School?', available from: http://www.ungei.org/resources/1612_500.html retrieved 20/1-09.

Klasen, S. (2002), 'Low Schooling for Girls, Slower Growth for All? Cross-Country Evidence on the Effect of Gender Inequality in Education on Economic Growth', World Bank Economic Review, Vol. 16, No. 3, pp. 345-373. http://wber.oxfordjournals.org/cgi/content/abstract/16/3/345

Kremer, M. R., Miguel, E. A. and Thornton, R. L. (2004), 'Incentives to Learn', Berkeley: Center for International and Development Economics Research, University of California. http://www.nber.org/papers/w10971

Liang, X. and Marble, K. (1996), 'Guatemala: Eduque a la Niña: Girls' Scholarship', Human Development Department, Washington D. C.: World Bank.

Maluccio, J. A. and Flores, R. (2004), 'Impact Evaluation of a Conditional Cash Transfer Program: the Nicaraguan Red de Proteccion Social', FCND Discussion Paper No. 184, Washington D. C.: International Food Policy Research Institute. http://www.ifpri.org/pubs/ABSTRACT/rr141.asp

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: http://www3.grips.ac.jp/~yamanota/UgandaUPE%20Oct%202005.pdf

Oster, E. and Thornton, R. (2009), 'Menstruation and Education in Nepal', NBER Working Paper no: 14853. http://papers.nber.org/papers/w14853

Parker W Susan, Teruel M. Graciela (2005) 'Randomisation and Social Program Evaluation: The Case of Progresa' Centro de Investigación y Docencia Económicas, A.C. (CIDE) in Mexico City: http://ann.sagepub.com/cgi/content/abstract/599/1/199

Phuyal, N., Thapa, R., Dahal, B. R., Shakya, A. and Acharya, P. (2003), 'Effectiveness of Incentive/ Scholarship Programmes for Girls and Disadvantaged Children', Kathmandu: Research Centre for Educational Innovation and Development, Tribhuvan University.

Ravallion, M. and Wodon, Q. (2000), 'Does Child Labour Displace Schooling? Evidence on Behavioural Responses to an Enrollment Subsidy', The Economic Journal, Vol. 110, pp. 158-175. Available at: http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1999/09/14/000094946_99060201584595/Rendered/PDF/multi_page.pdf

Raynor, J. And Wesson, K. (2006), 'The Girls' Stipend Program in Bangladesh', Journal of Education for International Development, Vol. 2, No. 2. www.equip123.net/JEID/articles/3/**Bangladesh**.pdf

Schady, N. and Araujo, M. C. (2008), 'Cash Transfers, Conditions, and School Enrollment in Equador', Economia, Spring, pp. 43-77. http://unjobs.org/authors/maria-caridad-araujo

Schultz, T. P. (2004), 'School subsidies for the poor: evaluating the Mexican Progresa poverty program', Journal of Development Economics, Vol. 74, No. 1, pp. 199-250. http://ideas.repec.org/p/egc/wpaper/834.html

Sen, A. (1999), 'Development as Freedom', Oxford: Oxford University Press.

Smith, L. C. and Haddad, L. (1999), 'Explaining Child Malnutrition in Developing Countries – A Cross-Country Analysis', Washington D. C.: International food Policy Institute.

Sutherland-Addy, E. (2002), 'Impact Assessment Study of the Girls' Education Programme in Ghana', Report prepared for UNICEF Ghana, available from: http://www.unicef.org/evaldatabase/files/GHA_2002_022.pdf - retrieved 20/1-09.

Sutherland-Addy, E. (2008), 'Gender Equity in Junior and Senior Secondary Education in Africa', World Bank Working Paper No. 140, Africa Region Human Development Department, Washington D. C.: World Bank.

Tembon, M. and Fort, L. (2008), 'Girls' Education in the 21st Century – Gender Equality, Empowerment, and Economic Growth', Washington D. C.: World Bank.

UN (2008), 'The Millennium Development Goals Report 2008', New York: United Nations. www.un.org/chinese/**millenniumgoals**/MDG**Report**2006.pdf

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

World Bank, Girl's Education webpage: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,contentMDK:20298916~menuPK:617572~pagePK:148956~piPK:216618~theSitePK:282386,00.html

Credits

This brief was written by Birte Snilstveit with inputs from Marie Gaarder, and Howard White, and edited by Christelle Chapoy and Howard White.

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