

School effectiveness and its impact on poor children

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- With most children in the world now having access to primary education, the global focus is shifting from access to quality, effectiveness, equity and learning outcomes. These are huge national policy concerns given the size of education budgets, and the hundreds of millions of children worldwide who are not developing adequate basic skills.
- Young Lives longitudinal data offer detailed evidence of inequality of educational outcomes within each of the four countries, and between poorest and least poor.
- The data have been used at both national and international levels to inform and support recommendations for change in education, including by UNESCO and the World Bank.
- Young Lives designed its dedicated school effectiveness surveys in collaboration with key stakeholders in the study countries to ensure that they reflected local policy demands in education and that findings had maximum potential for impact.
- Young Lives' work on school effectiveness and learning has had significant influence on the Department for International Development's (DFID) RISE programme (Research on Improving Systems of Education).

Setting the scene

The Millennium Development Goals set the aim of universalising primary schooling. While not fully met, the vast majority of children in developing countries now have access to five years of primary education, and the focus has shifted from access to quality, effectiveness, equity and learning. Evidence for improvements in enrolment and retention in primary school is impressive, but much less evidence is available on the levels of learning achieved and on the closely related issues of school quality and effectiveness. Children's high aspirations are too often undermined by the poor quality of many schools, and low quality reinforces existing disadvantages, especially when poor quality schools serve the poorest students. Improving achievement levels for poor children is central to overcoming the global crisis in learning. The Sustainable Development Goals (SDGs) set out a new aim, to 'ensure inclusive and quality education for all and promote lifelong learning' (SDG4), and also emphasise the need to achieve parity for girls in education.

Young Lives research on education: what makes us different?

Young Lives has been collecting information on education and learning over five rounds of regular household and child surveys, focussing on the key SDG priorities of quality, equity and learning. Our study is designed to help create 'detailed evidence on factors influencing school effectiveness for policymakers aiming to address the global learning crisis and Sustainable Development Goal agendas around learning quality' (Theory of Change, 2015). Longitudinal evidence is essential to address this question of how children learn; it enables the same children to be tracked in terms of their learning over many years, but also enables comparison of older and younger cohorts so that trends in educational achievement can be studied over time. The study design allows us to look at the relationship between household background and school achievement. And by assessing children at home, as well as in school, we ensure we are not missing out on those who were not attending school.

Crucially, in addition to routinely collecting educational data through the survey rounds (including measures of enrolment, participation and cognition), Young Lives has conducted dedicated **school effectiveness surveys** at both primary and secondary school level to help address the major data gap in this area. These offer detailed and robust evidence on the school, teacher and pupil factors that contribute to pupil learning and progress, and engage with the educational issues that matter at a local level. We are also able to link household data from the regular survey rounds with school data so that children's learning can be mapped against the features of the school they attend. We are the only group in the world using this methodology to analyse learning and school effectiveness across a diverse range of developing countries. Both technical notes and survey data are placed in the public domain as a global public good for research.

“Young Lives' unique approach to linking of household- and school-based data provides a vital evidence-base to inform progress towards the SDGs. The survey presents important policy-related findings based on an assessment not only on which children are learning, but also on school and teacher attributes that can make a difference to narrowing learning gaps.”

Pauline Rose, Professor of International Education, University of Cambridge

What do we know about education from our longitudinal data?

Analysis of educational data from survey Round 4 in 2013 showed significant evidence of inequality of outcomes within countries, especially for the poorest children, and reinforces the need for good quality schools that can help to address these inequalities:

- At age 12, children overwhelmingly aspired to vocational training or university (between 75% in Ethiopia and 92% in Peru), but by the age of 19 substantial numbers of those same children had left school.
- Enrolment gaps between poorest and least poor began to widen after age 12, and were much greater at age 19.
- There was consistent evidence that it is the poorest children, those in rural areas, and those with less educated parents who are doing least well in school across the countries.
- National differences in cognitive capacities are in place before children start school, reinforcing the importance of early life, including as a foundation for later school success.
- Comparing the Older and Younger Cohort at age 12 shows change over time. This approach identifies evidence of either no improvement or sometimes falling achievement levels in Ethiopia and Andhra Pradesh, but positive signs of rising achievement levels in Vietnam and Peru. Children in Vietnam were learning at a faster rate than in the other countries, identifying differences in productivity between educational systems and again

pointing to the important role played by school quality. In 2015 Vietnam's 15 year olds performed better in the international PISA tests than many developed countries, including the US and the UK, prompting a great deal of interest in how they had achieved such an impressive result. In 2016 Young Lives Research Associate Abhijeet Singh wrote about the findings on varying educational attainment in a [World Bank blog](#) (later republished on the World Economic Forum [Davos] website). He used Young Lives data to identify that there are significant differences in learning during the early primary school years, comparing Vietnam and Peru, and attributing the greater learning gain in Vietnam to school productivity.

In 2013 Young Lives pioneered the direct assessment of executive functioning with the Younger Cohort in Peru and Ethiopia. The term 'executive functioning' encompasses a range of important processes that are essential for learning and long-term success in life, including the ability to control attention and behaviour, and make effective use of memory. We believe this to be the first such assessment for large samples of children in developing countries. Over time, this data will help us to understand better how early investments such as pre-school attendance help to shape children's executive functioning.

Young Lives School Effectiveness Surveys

1. Primary School Surveys, 2010 to 2013

Between 2010 and 2013 Young Lives conducted in-depth Primary School Surveys to capture detailed information about children's experiences of schooling. In each country context, the design of the surveys varied according to national policy priorities and concerns following consultation. The school surveys allowed us to link longitudinal information on household and child characteristics from the household survey with data on the schools attended by the Young Lives children and children's achievements inside and outside the school. It provided policy-relevant information on the relationship between child development (and its determinants) and children's experience of school, including access, quality and progression. This combination of household, child and school-level data over time constitutes the comparative advantage of Young Lives.

- In Ethiopia and Vietnam, the innovative value-added design of these surveys generated a unique evidence base on factors associated with primary school effectiveness in Grades 4 and 5.
- In India, the focus on linking to the household data and unpicking the differences between government and private schools made a significant contribution to the 'low-fee' private schooling debate.
- In Peru, the survey tracked the main Young Lives cohort to their schools and facilitated analysis on opportunities to learn, pupil backgrounds and school types, exploiting the link to the rich longitudinal household data.

2. Secondary School Surveys, 2016 to 2017

The second round of School Surveys in 2016-17 were designed to capture detailed data on the quality of learning outcomes at secondary level, in recognition of the fact that secondary education in particular is crucial to breaking the intergenerational transmission of poverty in developing countries (World Bank, 2009). As access to basic education approaches universal levels in many developing countries, and concern shifts towards the ways in which schooling adequately prepares young people for further education and training or entry into the labour market, research into secondary education is both an evidence gap and increasingly important.

The Secondary School Surveys covered over 30,000 children in Ethiopia, India and Vietnam, with the Peru survey taking place slightly later in 2017. The broad design was similar in all countries, enabling cross-country comparisons of key measures, including the first directly comparable assessments of levels of literacy and numeracy across the study countries. However, Young Lives also built on relationships developed during the first School Survey, when findings were picked up by Ministries of Education in all four study countries, and engaged extensively with key stakeholders (NGOs and local and national government bodies) to identify the important policy questions facing school systems in each country. These interests were then integrated so that the survey instruments reflected the different educational priorities, policies and institutional structures in each study country.

This 'organic' model of engagement – negotiating the research design with the people who are going to use the data – ensures research relevance. It also means that the resulting data will be more valued by stakeholders as they have invested in it from the outset. The Secondary School Surveys also provided some of the first evidence from low- and middle-income countries on 21st century skills such as critical thinking and problem-solving, and will enable an investigation of the relationship between curriculum subjects and 21st century skills.

Key findings from these surveys include the following:

- Our assessment of 21st century skills among Vietnamese students finds that they are not just rote learners, and that assessing skills like problem-solving and critical thinking offers another dimension to how we understand school effectiveness and quality.
- In India, private-unaided schools achieve higher test scores, add more value and are attended by a more advantaged subset of children. However, even within private schools, the most effective schools are attended by students who are already more advantaged, which has considerable implications for equity.
- Findings from our school survey in Ethiopia indicate that schools in more advantaged areas are more effective, but also more equalising compared to schools in disadvantaged areas – which may increase inequalities in student learning outcomes.

“No other research team that I know of is doing anything like this on a global scale. Kudos!”

Luis Crouch, Vice President & Chief Technical Officer, RTI International

The impact of Young Lives research

1. The Primary School Surveys and longitudinal research

Data from the first wave of Young Lives school effectiveness studies in 2010-13 and from the longitudinal research have been widely used at both national and international level:

- Young Lives data on education and outcomes were used in the 2012 UNESCO Education for All Global Monitoring Report (GMR) entitled 'Youth and skills: Putting education to work'. Young Lives Peru Country Director Santiago Cueto is now part of the expert advisory group for the Global Monitoring Report.
- In Vietnam: Young Lives provides the only longitudinal evidence on skills development across the life-course in Vietnam, and, combined with other data sources such as employers' surveys and data on early childhood, Young Lives data were used extensively in the [World Bank's Vietnam Development Report 2014](#), which focused on 'Skilling up Vietnam: Preparing the workforce for a modern market economy'.
- Also in Vietnam, and following the launch of the Primary School Survey findings, the **World Bank funded project School Education Quality Assurance Program (SEQAP)** run by Vietnam's Ministry of Education and Training (MOET) approached Young Lives staff for advice on the application of EGRA (Early Grade Reading Assessments). EGRA is a key international test for measuring school-based learning and an important tool for assessing education quality and effectiveness. As a result of the advice EGRA tests were subsequently used by MOET in four provinces to measure the impact of SEQAP interventions.
- In Ethiopia, research from the Primary School Survey focused on equity considerations within the school system, and found that there was a divergence of learning levels in the country. These findings fed into the development of Education Sector Plans 2016-20, enabling a better allocation of resources.
- Also in Ethiopia, Young Lives has worked closely with Thanh Thi Mai, Senior Education Specialist, World Bank, in Addis Ababa. Young Lives data were used as part of the [World Bank's Ethiopia public expenditure review on Education 2015](#) to understand educational effectiveness, efficiency and equity, complementing World Bank-supported work such as the Service Delivery Indicators survey and enabling more robust decisions about prioritising funding between educational sectors and towards areas of relative disadvantage. Building on these established relations with the Ministry of Education, Young Lives was also invited to inform and advise on the roll-out of O-Class (zero grade) before the start of primary school, drawing on our expertise in early childhood to provide a strong comparative framework (see separate case study on **Early Childhood Development: informing policy and making it a priority**).

- In India, Young Lives was invited by the Ministry of Human Resource Development to present the longitudinal evidence on education emerging from Young Lives. The meeting was attended by 15 officials from the Ministry and academics from the National University of Educational Planning & Administration (NUEPA) and National Council of Educational Research & Training (NCERT). The Additional Secretary Ms Roma Ray commented that ‘*Young Lives does honest research and there should be more studies such as this in India*’.
- In Peru, Young Lives were approached in 2013 by Jaime Saavedra, a former Young Lives researcher who at the time was the new Education Minister in Peru, about ideas for raising the achievement of children who were underperforming at school. Country Director Santiago Cueto mentioned inequality as a big challenge for education in Peru, suggesting that children who were poor, indigenous or rural had lower performance and no network of support. Cueto discussed with him an idea for a programme of ‘school reinforcement’. The following year the government introduced a ‘pedagogical support’ programme that included school reinforcement as one of its components, inspired by the discussions with Young Lives. This programme has been rolled out since 2014 and is now very well-established in Peru.
- The Open Societies Foundations-funded Privatisation in Education Research Initiative (PERI) network commissioned a series of papers on private schooling using Young Lives data.

“ Young Lives team has started working with the education team at the World Bank since late 2014. The analysis of Young Lives population and school surveys contributed significantly to the understanding of improvement in education attainment on the one hand and challenges in reducing drop-outs and improving learning outcomes on the other hand. This analysis was used in the World Bank report: *Investing in Ethiopia’s Future - Education Sector Financing Review 2015*. ”

Thanh Thi Mai, Senior Education Specialist World Bank Ethiopia

2. Impact on DFID’s RISE programme

The strength of Young Lives’ work on school effectiveness and learning is reflected in the significant influence it has had on DFID’s RISE programme (Research on Improving Systems of Education). DFID decided to fund this large project in part in response to the interest generated from Young Lives school effectiveness survey findings. Young Lives has collaborated closely on how learning outcomes are measured in RISE, and there has been significant cross-fertilisation, with our methods integrated into the programme. Young Lives also influenced the choice of study countries (Vietnam, India and Ethiopia are all included). Vietnam in particular was chosen as a result of the Young Lives research showing how and why their schools perform so well. Collaborating researchers from RISE are now helping to analyse the data gathered by the secondary school surveys. Young Lives has contributed to the foundation for RISE, which would not have existed in its current form without Young Lives. (See separate case study on use of Influencing the design and methodology of other studies).

3. Building relationships with key educational stakeholders through the Secondary School Surveys

As described above, the consultation process itself has strengthened local relationships and improved Young Lives’ reputation in education research, as well as making it more likely that data from the surveys will be valued and used by stakeholders.

In Vietnam, Young Lives consulted with the World Bank, the Asian Development Bank and the Vietnam Institute of Educational Sciences (VNIES), the government organisation that designs the school curriculum. From this it emerged that a key area of education policy interest was the transition to upper secondary school at age 15, and so the survey was designed to address questions on the factors affecting transition, particularly ethnic background. Vietnam’s Development and Policies Research Centre (DEPOCEN) has already expressed an interest in using Young Lives data from the school survey, which will lead to wider impact of the data. Young Lives provides the only longitudinal evidence on skills development across the life-course in Vietnam.

In India, Young Lives met with state Secretaries of Education in Andhra Pradesh and Telangana and with the Ministry of Human Resource Development in Delhi, who oversee education in India as a whole, as well as with the World Bank, the British Council and DFID. The key areas of policy interest emerging from these meetings were to develop a better understanding of learning outcomes in different types of schools, and in Telangana in particular to explore the impact of provision of English medium education in government schools, something which the state has recently begun to offer. Young Lives also worked in partnership with Educational Initiatives, an Indian organisation working on educational research and school-based interventions, and drew on their expertise in the design of English and maths tests for all three country studies. Educational Initiatives work closely on educational assessments with the Indian government at both state and national level, and also work with the World Bank in India and with RISE. Partnering with them allows Young Lives to draw on their networks so as to more effectively disseminate findings from the school surveys.

In a new initiative Young Lives was asked to advise India’s National Council on Educational Research and Training (NCERT) on the reporting of results from the largest standardised student achievement tests (the Grade 10 NAS; National Achievement Survey), working with the World Bank to develop State and District level report cards. This initiative developed out of the work done by Young Lives to develop test-score scales for its own Secondary School Surveys and demonstrates important methodological influence, innovation and impact. Young Lives has also received requests from the state government in Telangana to advise them on education studies that are to be conducted in the state. A classroom observation sub-study funded by the Bill & Melinda Gates Foundation also took place in India in 2017-18, with the aim of helping to explore some of the classroom factors associated with differences in student learning outcomes. This was also very well received at a recent meeting of stakeholders in Delhi.

“What you’ve done is really remarkable... I think we are fairly aware of the issues that beset the education system. What we aren’t aware of is how to sort it out ... The inputs that come from studies like these would be very useful for us to devise a strategy [for education in India].”

Chief Secretary of the Ministry of Human Resource Development in India, at the launch of the Secondary School Survey findings



In Ethiopia, consultation has taken place with the World Bank (who also advised on the first school survey), UNICEF, DFID and Ministry of Education representatives in the Ethiopian Government. For the Government, one of the main issues of interest is that of language, and how the language of instruction affects learning outcomes. Language use is viewed as important for nation-building and social cohesion. Amharic, while not an official national language, is the *de facto* language of communication, and it is recognised that weak Amharic language skills may limit some young people’s opportunities to find employment or further training outside their home

communities. As a result of these discussions, Young Lives added an Amharic assessment into the survey. There is very little information about learning levels in Ethiopia, so Young Lives’ contributions in this area are especially valuable to the Government.

At an international level, there is considerable discussion about how to measure educational outcomes and hence progress towards SDG4. Young Lives is contributing to key discussions on learning metrics in international forums such as the World Bank, SABER, CIES, UKFIET and RISE. Young Lives also contributed evidence to the International Development Committee’s inquiry into DFID’s work on education: ‘Leaving no one behind?’. These interactions are building the conditions for impact of Young Lives’ educational evidence in the future, and they enable Young Lives to have international influence beyond its four study countries.

“I am writing to express my appreciation for the work of the Young Lives programme and the value that it provides to researchers, policy makers and practitioners. I am currently working on two projects with the World Bank, the World Development Report 2018 (Education) and a retrospective on World Development Report 2007 (Youth). The recent products of Young Lives have provided me with some superb and very timely resources for these projects:

- A latent class approach to understanding patterns of peer victimization in four low resource settings. In the paper for the WDR18 on ‘fragility, conflict and violence’, we are taking a wider approach to ‘violence’, including issues of gender-based violence and bullying, with the latter an under-emphasized and serious problem.
- Patterns and Drivers of Internal Migration among Youth in Ethiopia, India, Peru and Vietnam. Part of the emphasis in the youth (WDR07) work is that we need a much more nuanced ‘spatial’ approach to youth and their mobility, and this paper is a very timely resource for this emerging area of policy discussion.
- Finally the recent study on children’s experiences of violence in Viet Nam, Ethiopia and Peru is invaluable to both the WDR18 and the 2007 retrospective work.”

Stephen Commins, Lecturer in Urban Planning and Associate Director, Global Public Affairs, UCLA