

Is School Education Breaking the Cycle of Poverty for Children?

Factors Shaping Education
Inequalities in Ethiopia, India,
Peru and Vietnam

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Helen Murray

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Young Lives is a 15-year study of childhood poverty in Ethiopia, the state of Andhra Pradesh in India, Peru and Vietnam, following the lives of 3,000 children in each country. It is core-funded from 2001 to 2017 by UK aid from the Department for International Development (DFID) and co-funded by the Netherlands Ministry of Foreign Affairs from 2010-2014. The full text of all Young Lives publications and more information about our work is available on our website.

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The Author

Helen Murray is a policy officer at Young Lives. Over the past ten years she has worked for both local and international organisations in the fields of education, development and conflict. She has published research on education and society in the Middle East and North Africa and is currently undertaking a PhD on the role of higher education partnerships in social and political change.

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Summary and key findings

School education is held up as an ‘escape route from poverty’. Millions of poor children and families are buying into this promise and often investing scarce resources in going to school, in the hope that it will lead to a better life. This paper looks at children’s unequal trajectories from early childhood through to the time they leave school, examining how various factors are shaping their educational opportunities and achievement. It synthesises existing Young Lives analysis based on three rounds of research with two age cohorts in each of the four study countries (Ethiopia, Andhra Pradesh in India, Peru and Vietnam). While the paper does not explore indicators of school quality, it looks at the large achievement gaps that exist between different groups of children, which need to be of central consideration in the development of strategies to improve education quality. In order for school education to start fulfilling its promise as a route out of poverty, there is a need for more equitable, better-quality schooling and training that can translate into realistic opportunities for young people.

- 1. Unequal school trajectories are set in motion during early childhood.** For example, in Peru we find that whether or not a child attended pre-school, together with cognitive ability at the age of 5, are both associated with learning outcomes at the age of 8.
- 2. While there is high primary school enrolment in all four of the study countries, there are still stark inequalities in children’s progression through school.** In Ethiopia, for example, only 18 per cent (about one in five) of the Older Cohort had completed primary school by the age of 15, despite 90 per cent still being enrolled in school.
- 3. Children’s learning outcomes are strongly shaped by household-level factors.** Language is a key driver of achievement gaps for children in Vietnam and Peru, while levels of parental education are strongly associated with achievement gaps in all four of the study countries.
- 4. Intersecting inequalities account for large achievement gaps.** For example, in Andhra Pradesh on average boys and girls had similar maths scores at the age of 8. However combining the intersections of household disadvantage and gender shows that disadvantaged girls do almost twice as badly as disadvantaged boys in comparison to their more advantaged counterparts.
- 5. Inflexible schooling further excludes children who need to combine school with paid work and responsibilities at home.** Domestic and agricultural work (largely unpaid) accounts for 39 per cent of the school drop-out rate among boys in the Ethiopia sample, while child illness and caring for sick relatives also impact on school participation, particularly for girls.
- 6. The growth of low-fee private education in Andhra Pradesh has clear equity implications in relation to location, gender and wealth.** For example, while the percentage of 8-year-old children in private schools increased from 24 to 44 per cent between 2002 and 2009, the chances of boys going to private schools rose faster than for girls, with a 9 per cent gap by the age of 8.
- 7. Educational aspirations remain persistently high across all groups but young people are not relying on education as a route to employment.** Typically between 60 per cent and 80 per cent of 15-year-olds aspired to jobs requiring university-level education but many of them continued to develop more practical skills through paid and unpaid work outside of school as a basis for future employment.

1. Introduction

The promise of education as a means of transformation and escape from poverty is at the heart of national and global policy commitments to investing in school education. It is also a primary motivator in the far-reaching financial sacrifices that families often make to send their children to school. Yet as we get closer to achieving universal access to primary education in many countries, questions are being raised about the impacts of expanding education systems, the quality of schooling on offer and the persistent inequalities that lie beneath national enrolment averages.

In following the life trajectories of around 12,000 children in four countries over 15 years, the Young Lives study is well placed to explore the relationship between poverty and school education, and the extent to which education is compensating for or reinforcing the multiple disadvantages that some children bring with them into the classroom. This paper looks specifically at the factors that are shaping inequalities in schooling in each of the Young Lives study countries – Ethiopia, India (Andhra Pradesh), Peru and Vietnam. We are particularly concerned with how education inequalities are manifested: when do they begin, how do they evolve and where do children end up?

From a longitudinal perspective we find that unequal school trajectories are set in motion during early childhood, even before a child enters primary school. While there is high primary school enrolment in all four of the study countries, there are stark inequalities in children's progression through school, and learning outcomes are strongly shaped by household-level factors. At the same time aspirations for education remain persistently high across all groups in spite of poor-quality schooling and limited opportunities, but young people are not relying on the promise of education as their sole route to employment.

2. Education, poverty and equity: questions arising from research and policy

Internationally, the question of equity has risen up the international development agenda across a range of sectors. This is in response to the fact that global development goals and national strategies are still failing the poorest and most marginalised groups in society, often in spite of economic growth and overall increases in access to services (UNDP 2011; Vandemoortele 2011). The growing focus on equity is particularly relevant to education, since education is often seen to be an important policy route into reducing the intergenerational transmission of poverty.

Yet impressive increases in primary school enrolment and gender parity have not resulted in corresponding improvements in the quality of education on offer, particularly for poorer children. These girls and boys are doing less well in school because of intersecting factors including wealth, location, caste, ethnicity, language and gender; they are also dropping out of school earlier, often with limited skills gained. At the same time disadvantaged groups are often the most costly to reach in terms of quality provision.

While there are now 52 million more children in school than in 1999, 67 million children still remain out of school, with a projected 56 million out of school in 2015 on current rates of progress (UNESCO 2011). Of those children who have been enrolled in school, millions are leaving without having acquired basic skills. In some countries in sub-Saharan Africa, for example, young adults with five years of education have a 40 per cent probability of being illiterate (UNESCO 2010). The challenge of how to improve education quality is now a priority for governments, alongside tackling how best to reach those children who are still being left behind.

One of the chief criticisms levelled at the current MDG framework is that by focusing on improving national averages, governments are paying inadequate attention to the often entrenched group-based inequalities that prevent certain sections of society from accessing resources and opportunities on the basis of who they are, or where they live (Stewart 2002; Lewin 2007; Tikly and Barrett 2011). Even where governments are setting targets for marginalised children in their education plans, it is not necessarily the case that they are challenging education inequalities effectively, or reaching the children who need most support. While certain inequalities, such as gender and rural location, are addressed in numerous national plans, others such as ethnicity and language are relatively under-targeted (UNESCO 2009; Pinnock 2009).

It is no longer the case that education is necessarily, or even predominantly, provided by the state. The growing phenomenon of low-fee private education in developing countries points to a crisis in public education provision, which is failing to meet parental expectations. Low-fee private education is viewed by some as an effective way of providing better-quality education for poor children who are under-served by the state system (Tooley and Dixon 2006). However, the nature and impacts of private education in less economically developed countries is complex and under-researched (Srivastava and Walford 2010), raising questions about the potential long-term inequalities of a marketised education system and its limitations in contributing to Education for All goals.

Despite poor-quality schooling in many countries and the challenges faced in balancing the opportunity costs of attending school, educational aspirations among young people in developing countries appear undiminished. While there is something very hopeful about this, it is also worrying. It may be that children and their families see no alternative route out of poverty so there is nothing to be lost (except opportunity cost) by aiming high in education. However, the 'worry' concerns the unfairness of the continued tolerance of poor people across generations for unfulfilled ambition via education (Little 1978, 2012).

3. About Young Lives

Young Lives is a longitudinal study of childhood poverty, tracing the lives of around 12,000 children across Ethiopia, Andhra Pradesh in India, Peru and Vietnam over 15 years (2002–17). The aim of the study is to build understanding of the causes, dynamics and consequences of childhood poverty and amass an evidence base to contribute to improving policies and programmes for children in poverty.

The study design includes two cohorts of children, the Younger Cohort born in 2000–1 and the Older Cohort born in 1994–5. Young Lives has a sentinel site design, with around 20 sites selected in each country to reflect geographic and socio-economic diversity. With sites over-sampled from poorer areas, Young Lives is not a representative study but enables analysis of change and effects in the lives of children and young people over time.

The quantitative survey is carried out every three years with 3,000 children in each of the four study countries, and includes separate questionnaires for their primary caregivers and for gathering community-level data. To date, three survey rounds have been conducted, with the third round in 2009–10 when the two age cohorts had reached the ages of 8 and 15 years old. The qualitative component of the research takes place between survey rounds and works with a smaller number of sub-sample children, as well as their caregivers and teachers.

Young Lives introduced a new school-based survey in 2009 to enable us to further explore what is taking place within the schools that children in the Young Lives sample are attending. The school-based survey covers a range of schools (including public and private) and includes indicators of school quality, and examination of teaching methods, teacher training and performance, student participation and interaction, school organisation and infrastructure. Crucially, we are able to link this school-based data with the longitudinal child and household data, to better understand the linkages between school education and other aspects of children's lives and outcomes over time.

4. Education inequalities in four diverse country contexts

The education contexts in each of the Young Lives study countries are shaped by different economic and policy environments and offer a snapshot of the types of challenges faced by governments and other actors in trying to address inequalities in education. They also show how inequalities persist and interact in different ways.

Ethiopia, for example, has facilitated enormous increases in school enrolment over the last decade, but this has not been accompanied by increases in education quality. In recognition of the need to focus more on quality, the Ethiopian Government is coordinating with key international donors to implement the General Education Quality Improvement Programme (GEQIP). Young Lives research highlights the factors that hold children back at school, including household poverty and incidences of child and parental illness, as well as the educational disparities between rural and urban areas across the country (Woldehanna et al. 2011; Orkin 2011; Frost and Rolleston 2011).

In India, the Government has introduced the largest ongoing Education For All programme in the world to increase school access for disadvantaged groups (Sarva Shiksha Abhiyan), while the 2009 Right to Education Act reaffirms the right to education for all children between the ages of 6 and 14 years old. Young Lives research explores two particularly contentious areas of debate: the role of the private sector in education (Woodhead et al. 2012) and the relationship between school and child work (Morrow and Vennam 2009). We also see that persistent inequalities remain in relation to education access, quality and outcomes.

By contrast, Peru has very high levels of school enrolment but national student assessments continue to find that the majority of children are performing well below acceptable levels of educational achievement (World Bank 2007). While the national debate around improving public education in Peru tends to be framed in terms of quality rather than equity, Young Lives research shows that the lowest education outcomes are among the poorest sections of society and suggests that language and ethnicity are very significant, as well as geographic and economic inequalities (Cueto et al. 2011).

The role of ethnicity and language in shaping education inequalities is of particular policy concern in Vietnam. In spite of efforts to improve education and general living standards for the country's 53 ethnic minority groups, who represent 14.5 per cent of the population but constitute 45 per cent of the poor, the large gaps between majority and minority groups in education still persist (Truong 2009; World Bank 2009). While primary school enrolment is near-universal in Vietnam, the country also has the largest body of older out-of-school children in South-East Asia and Young Lives research shows how this is linked with both poverty and levels of parental education (Le Thuc Duc et al. 2011).

5. Factors shaping education inequalities in Ethiopia, India, Peru and Vietnam

The Young Lives survey design was not intended to create a nationally representative sample and as such the findings cannot be compared across countries. However, it is possible to identify a number of themes that have cross-country relevance. This section provides a synthesis of Young Lives findings in these areas across the four study countries.

5.1 Unequal education trajectories start in early childhood

The Young Lives data reveal that the stage is set for inequitable education access and outcomes even before a child reaches the age of entering primary school. Two important factors shape transition to school and cognitive development: early life malnutrition (measured by stunting in early childhood) and access to pre-school. It is now well established that malnutrition during the first years of life can have long-lasting implications for children's cognitive development (Grantham-McGregor et al. 2007) and, further, that access to good-quality care and education in early childhood can improve long-term nutritional, health and education outcomes (Heckman 2006; Engle et al. 2007). The Young Lives findings both reflect this existing research and also show how malnutrition and access to pre-school are strongly shaped by inequalities based on socio-economic, geographical or ethnic groups.

For example, 60 per cent of ethnic minority children in the Young Lives sample in Vietnam are stunted at the age of 5, compared to 19 per cent of children from the ethnic majority (Le Thuc Duc et al. 2008). In India, we see that stunting rates have been particularly slow to change, with just a 4 per cent improvement between 2002 and 2009, and no improvement among the poorest 40 per cent of children in our sample (Kumar 2012). Stunting in children is caused by the early life effects of nutrition insufficiency (either through lack of sufficient nutrition, or by diseases which impair nutritional absorption), and so household conditions shape

development in ways that affect children's school trajectories. Findings from all four of the study countries indicate that children who are stunted at the age of 1 are more likely to have lower levels of cognitive ability than other children at the age of 5 (Helmerts and Patnam 2009; Le Thuc Duc 2009; Sanchez 2009). Moreover, this association between nutrition and cognitive outcomes carries over to later childhood when stunted children continue to have lower levels of reading, writing and mathematical skills than other children at the age of 12. In Ethiopia, for example, stunted children in the Young Lives sample are nearly one whole grade behind non-stunted children at the age of 12 (Dercon 2008) (see Table 1).

Table 1. Achievement deficits of (average) stunted children as compared to non-stunted children (aged 12)

	Ethiopia	India	Peru	Vietnam
Grade deficit (in years), between stunted and non-stunted children	-0.9	-0.3	-0.5	-0.4
Writing skills: % of children that write without difficulty (deficit in percentage points)	-18.1	-7.0	-13.4	-6.8
Reading skills: % of children that read sentences without difficulty (deficit in percentage points)	-15.6	-2.5	-2.3	-5.4

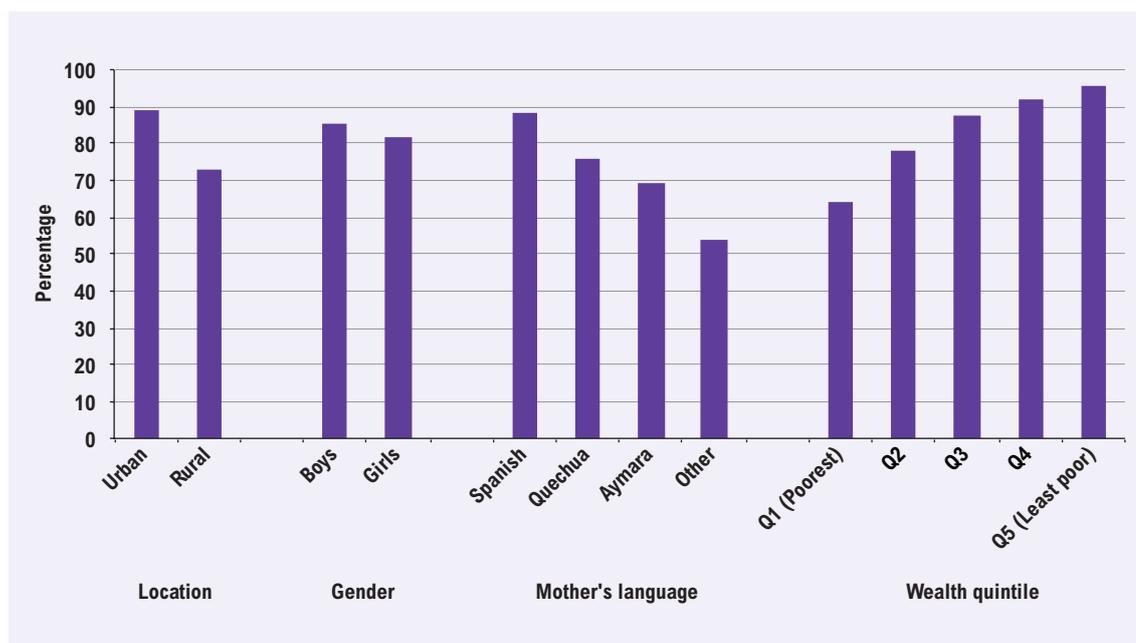
Source: Adapted from Dercon 2008. Based on Young Lives Older Cohort data, 2006.

Investing in early childhood care and education (ECCE) is seen to have enormous potential for interrupting the transmission of poverty between generations and ensuring that children from the poorest sections of society have a better start in life (Engle et al. 2007). In line with global trends, Young Lives children often have experience of pre-school: 94 per cent of Young Lives children in Vietnam have attended pre-school at some point since their third birthday, 87 per cent in Andhra Pradesh, and 84 per cent in Peru. In Ethiopia the figure is lower at one in four (25 per cent) reflecting a much less developed sector in early childhood provision.¹ But once these figures are disaggregated it becomes clear that the most disadvantaged groups are significantly under-represented in accessing pre-school education across all four of the study countries, suggesting that early childhood provision is not reaching the poorest children, who need it most (Woodhead et al. 2010; Murray 2010).

In Peru, 95 per cent of children in non-poor households participating in the Young Lives survey had spent some time at pre-school, but that figure fell to just 64 per cent for the poorest and between 76 per cent and 54 per cent for different ethnic minority groups (Escobal et al. 2008) (see Figure 1). Virtually all children of mothers with more than ten years of education had attended pre-school in the Peru sample, but this dropped to just under a third (30 per cent) of children whose mothers had less than five years of education (ibid.). Peru's *Wawa Wasi* early childhood programme specifically targets disadvantaged groups (Cueto et al. 2009).

¹ Ethiopia's Early Childhood Care and Education Strategic Framework was introduced in 2010 by the Ministries of Education, Health and Women's Affairs in collaboration with UNICEF and other development partners.

Figure 1. Pre-school enrolment in Peru according to location, gender, mother's mother tongue and wealth quintile² (Younger Cohort, 2006) (%)



Source: Escobal et al. 2008.

These inequalities were just as stark in Ethiopia, where 25 per cent of caregivers reported that their child had attended pre-school. Just 4 per cent of rural children in the Ethiopia sample had attended pre-school. Attendance levels in urban areas were strongly linked to income, so that only 20 per cent of the poorest households had accessed pre-school, compared to 70 per cent of children from better-off families (Woodhead et al. 2010). At the same time there is a question of market demand in the Ethiopia context; for example poor children in urban areas may be more likely to access pre-school education than more well-off children in rural areas because of lower demand outside towns and cities.

Young Lives data show that whether or not a child attended pre-school has an important bearing on their subsequent progression through school. In other words, inequalities in education not only start early, they also set in motion later disadvantages in relation to progression through school and achievement outcomes. For example, looking at Peru, Cueto et al. (forthcoming) analyse the household characteristics that contribute to unequal educational outcomes over time and find that the gaps in cognitive ability at the age of 5 tend to remain the same at the age of 8. Children with mothers who have no secondary education and/or speak an indigenous language are less likely to attend pre-school and have poorer abilities at the age of 5. These same children are more likely to attend primary schools with poor resources, to be behind their normative grade and to have poorer achievement results at the age of 8. While it may be possible to diminish these gaps, research does show that children who attend pre-school have better cognitive outcomes at the age of 8.

² In this analysis, the wealth index is constructed by three equally weighted elements (housing conditions, basic service access and consumer durables). This allows households to be ranked by material situation and enables the construction of quintile (fifth) groups.

5.2 High enrolment but stark inequalities in children's progression through school

Round 3 of survey data, collected in 2009, enabled comparisons between school access among the Older Cohort children at the age of 8 in 2002 (Round 1) and the Younger Cohort at the age of 8 in 2009 (Round 3). In Andhra Pradesh, Peru and Vietnam, school enrolment was already 97 per cent or above in 2002, and remained unchanged in 2009. Over the same time period, the enrolment rate of 8-year-olds in rural areas of Ethiopia rose dramatically, from 51 per cent in 2002 to 69 per cent in 2009, while the enrolment rate of 8-year-olds across the whole Ethiopia sample increased from 66 to 77 per cent (Woldehanna et al. 2011).

However, in all the countries except Peru, children of all ages growing up in rural areas are less likely to be enrolled in school than children in urban areas. Ethnicity is a further predictor of enrolment gaps, particularly in Vietnam. Among 12-year olds, at Round 2 of data collection in Vietnam in 2006, the enrolment rate of Kinh ethnic majority children was 13 percentage points higher than that of minorities (Le Thuc Duc et al. 2008). In Andhra Pradesh, wealth is a key factor in school enrolment, with 17 per cent gaps in school access between the poorest and 'wealthiest' (non-poor) quintiles in the sample (Dornan 2010).

Furthermore, school enrolment does not indicate school attendance, which is where inequalities in school access between different groups become much starker. In particular, late enrolment, slow progression through school (grade-for-age) and dropping out are all higher among disadvantaged groups.

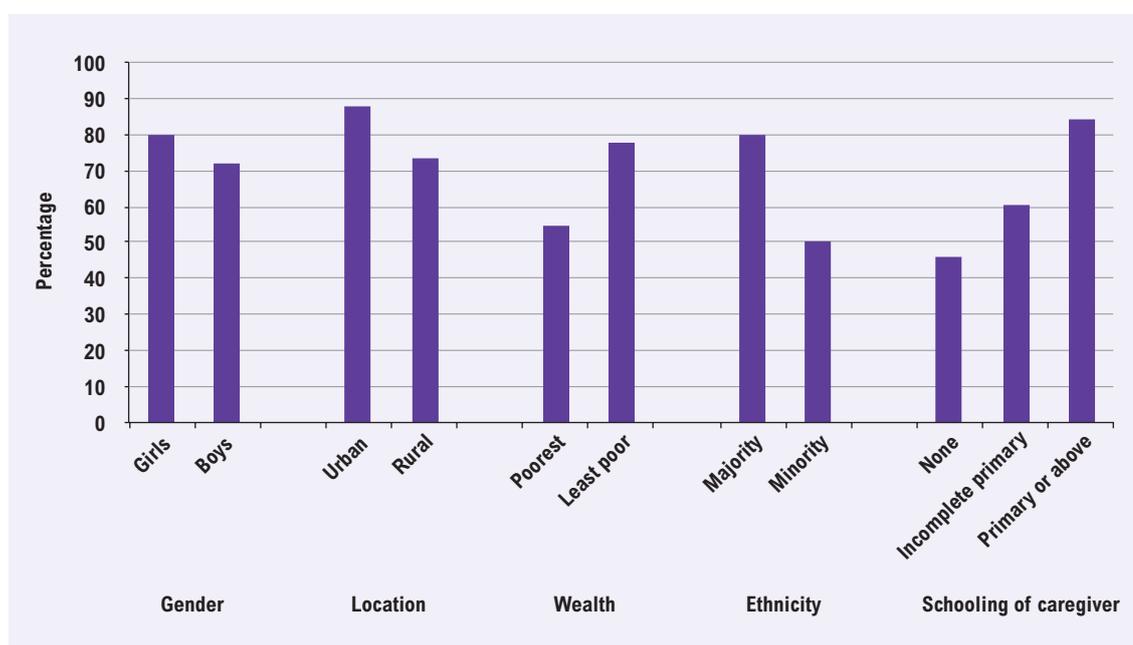
Late enrolment in primary school is also linked to slow grade progression and the likelihood of dropping out of school early. In Ethiopia late enrolment is common. Young Lives children in both cohorts attended school in a wide range of school grades, despite children in each cohort being of similar ages. Indeed, while the official age for entering primary school in Ethiopia is age 7, some children in the Young Lives sample started school at 13 or older (Frost and Rolleston 2011). In addition to late initial enrolment, children were also frequently repeating grades or dropping out for a period of time and then returning to school. Frost and Rolleston identified three main determinant factors in a child being closer to the 'expected' age for grade: having a caregiver who could read, being in a wealthier household, and being taller at Round 1 of data collection in 2002 (this last factor suggesting that stunting also affects caregiver perceptions of school readiness).

At Round 3 of data collection in 2009, when the Older Cohort were between 15 and 16 years of age, 89.6 per cent of them were still enrolled in school in Ethiopia, 77.3 per cent in India, 92.9 per cent in Peru and 76.9 per cent in Vietnam. However, they had not all progressed uninterrupted through the school system. In Ethiopia, just 18 per cent of the Older Cohort had completed primary school at the age of 15. Furthermore, the rural drop-out rate (12 per cent) was three times as high as in urban areas (4 per cent) while children from poorer households (9 per cent) and those whose mothers had had no education (11 per cent) were also more likely to drop out (Woldehanna et al. 2011).

It is also striking that Vietnam, which has close to full primary school enrolment, now has the largest number of out-of-school children of secondary school age in South-East Asia. By Round 3 of the Young Lives survey, over 20 per cent of the Older Cohort, aged 15–16 years old, had left school, with sizeable differences between rural and urban, ethnic majority and minority, and poor and non-poor groups. Just over half of the poor 15-year-olds attended school in Round 3 compared to 78 per cent of their non-poor counterparts (see Figure 2). This

gap was larger for children from ethnic minority backgrounds and for those whose parents have no education, only 46 per cent of whom were still in school (Le Thuc Duc et al. 2011).

Figure 2. School enrolment among the Older Cohort in Vietnam at age 15 (2009) by gender, location, wealth, ethnicity and caregiver's schooling (%)



Source: Le Thuc Duc et al. 2011

The Young Lives data show that there are different factors in children and young people's reasons for dropping out of school. These range from the costs of schooling and the need to be in work to support the family, to children's own interest in schooling, which perhaps relates to the quality of the education on offer as well as perceptions of usefulness for employment opportunities. In Ethiopia, for example, the most common reason given for drop-out was that the child was needed for domestic or agricultural work (see Table 2). But family illness appeared to be just as prevalent a reason for dropping out as paid work for boys; and for girls it is actually higher (Frost and Rolleston 2011).

Table 2. Reasons for drop-out in Ethiopia by gender and location

Reason for drop-out	Total		Girls		Boys		Urban		Rural	
	N	%	N	%	N	%	N	%	N	%
Domestic/agricultural work	228	30.6	12	6.4	216	38.6	28	21.2	200	32.5
Illness or disability of child	109	14.6	23	12.2	86	15.4	21	15.9	88	14.3
Child does not want to go	95	12.7	26	13.8	69	12.3	5	3.8	90	14.6
Direct costs too high	71	9.5	27	14.4	44	7.9	21	15.9	50	8.1
Other	48	6.4	14	7.4	34	6.1	13	9.8	35	5.7
Needed for paid work	47	6.3	12	6.4	35	6.3	14	10.6	33	5.4
Other family issues (e.g. illness of family member)	47	6.3	22	11.7	25	4.5	7	5.3	40	6.5
Needed to look after siblings	37	5.0	30	16.0	7	1.3	12	9.1	25	4.1
School too far or other transport issues	24	3.2	10	5.3	14	2.5	2	1.5	22	3.6
Banned from school	22	2.9	5	2.7	17	3.0	6	4.5	16	2.6
Schooling is not the best way to get a job	19	2.5	7	3.7	12	2.1	3	2.3	16	2.6
Total	747	100	188	100	559	100	132	100	615	100

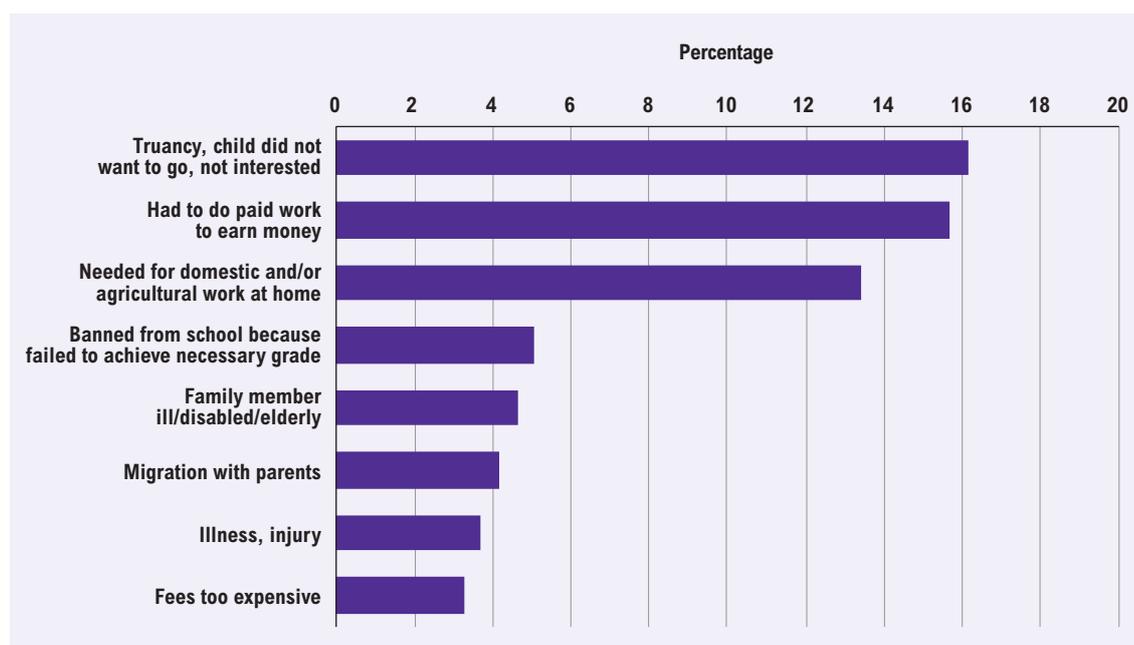
Source: Frost and Rolleston 2011. Young Lives Ethiopia household survey.

Orkin (2011) has used the Young Lives data to explore the effects of child and parental illness on school participation in rural Ethiopia and concludes that flexibility on the part of teachers and the school is key to whether or not the child is forced to repeat grades, leading to greater probability of them dropping out of school altogether. In a mixed-methods analysis she highlights the case study of Shonah whose school trajectory was interrupted both by her mother's illness, which led Shonah to drop out of school in Grade 1 to take on domestic duties, and then by Shonah's own ill-health, which forced her to drop out twice more. Shonah's case illustrates the importance of flexible schooling, which is discussed in greater detail below.

In Peru, drop-out rates were three times higher among rural children Older Cohort children in Round 3 than for their urban peers, with rural location overlapping with other factors such as poverty and ethnicity. Drop-out rates were also high among children of mothers who did not complete primary school, and for children from the poorest households. (Cueto et al. 2011). In Vietnam, children were asked about the main reasons for leaving school, with the most common answer being family hardship. However, underachievement at school was also articulated, as described by one boy from an ethnic minority group: 'I couldn't read. I couldn't count. I did terrible, so bad that I did not care [to go on]' (Truong 2009). Among the factors at play, difficulties with language and children's own sense of being included or excluded at school could feature.

Young Lives also collects data on non-attendance (as opposed to non-enrolment) at school. Data from Andhra Pradesh collected in 2009 when the Older Cohort was around 15 years of age, suggest three main reasons for non-attendance at school: not wanting to go or lack of interest; needing to leave school to earn money; and needing to leave for domestic and/or agricultural work at home (see Figure 3). It is striking that not wanting to go to school or lack of interest is a major factor alongside poverty and work. This may simply be because it masks other underlying issues such as a child falling behind in school. On the other hand it may also connect to questions of quality and relevance of education.

Figure 3. Reasons for not attending school among the Older Cohort in Andhra Pradesh at age 15 (2009) (%)



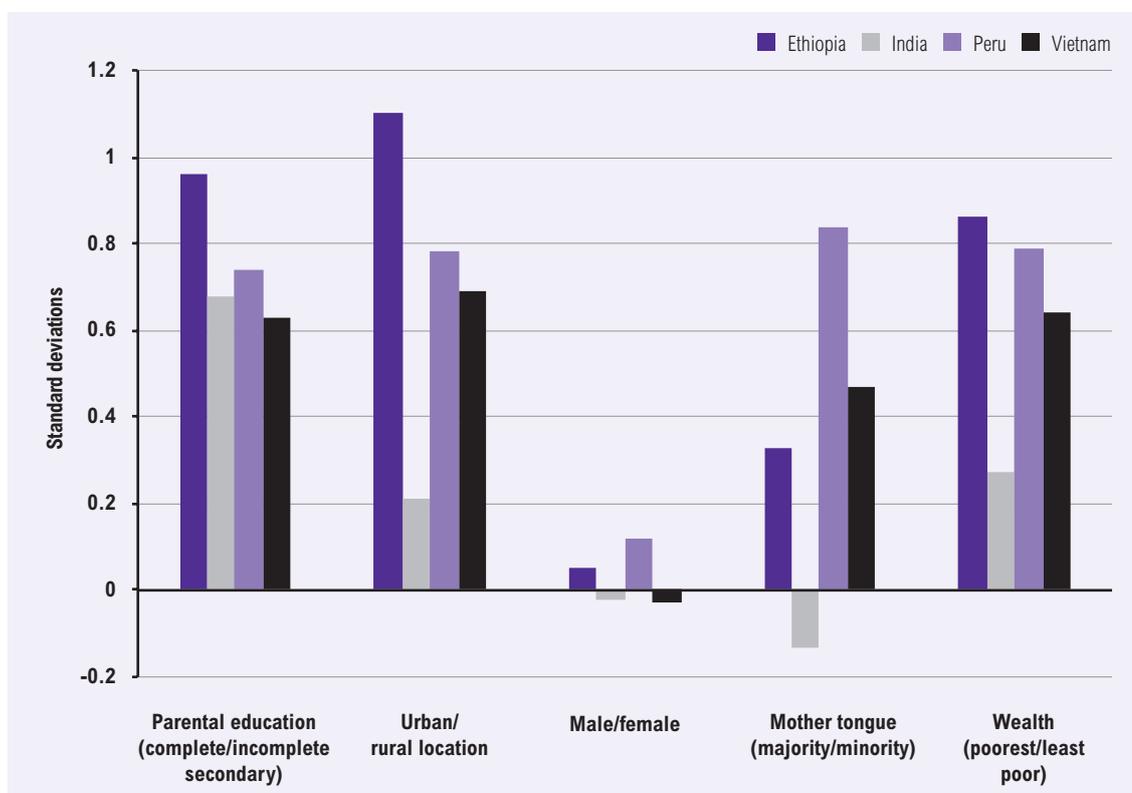
Source: Woodhead 2010.

5.3 Education achievement gaps in the absence of quality schooling for all

While challenges in increasing access to education remain, it is well recognised that an even bigger challenge relates to improving the often poor quality of schooling on offer. In all of the Young Lives study countries the question of school quality is of major policy concern and links to a wider agenda for ensuring better learning outcomes and opportunities for all. Measuring school quality and effectiveness is not the focus of this paper, but rather the stark education achievement gaps that exist between different groups, which also need to be a central consideration for education quality improvement strategies.

Figure 4 shows gaps in mathematics achievement among the Younger Cohort at the age of 8 in 2006, relating to level of parental education, rural or urban location, gender and mother tongue. The units represent standard deviations, which is a statistical method to allow comparison between two dissimilar things. In the graphs below, the mean for each country is set at 0 and the variations between different groups shown as standard deviations above or below the mean.³ Parental education was linked to inequalities in children's learning outcomes in all countries, and was the most important factor in India, while urban–rural divisions were also important, particularly in Ethiopia, Peru and Vietnam, but less so in India. It is clear that language was very important in Peru and Vietnam, with sizable achievement gaps between majority Spanish or Vietnamese speakers and groups speaking minority languages as their mother tongue. Wealth also accounted for achievement gaps across all countries, though was less important in India.

Figure 4. Gaps in mathematics achievement among the Younger Cohort at the age of 8 (2009)



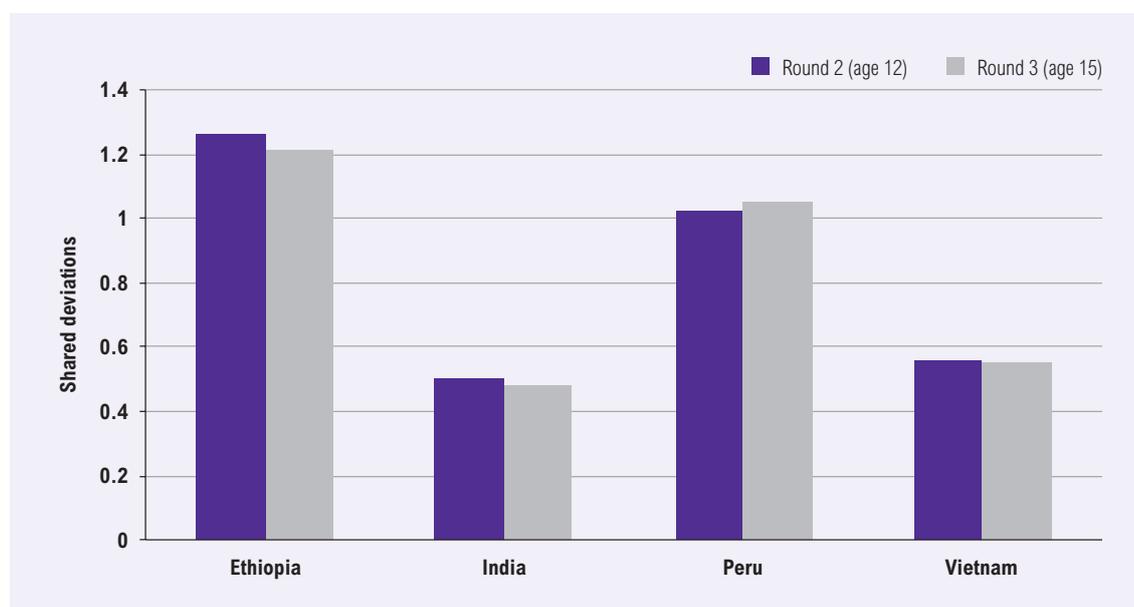
Source: Cueto et al. 2011

³ A difference in standard deviations of 0.2 could be considered small, 0.5 medium, and 0.8 large.

The qualitative research provides additional insights into the experiences of children from minority backgrounds learning in a language other than their mother tongue. For example, the parent of a child from the H'Roi minority group in Vietnam described how, 'Kieu solves numeric calculations instantly. But when the teacher starts putting it in words, like "Hoa has five nectarines..." she gets confused. She did not know that a nectarine is similar to a peach, anyway.' (Truong 2009).

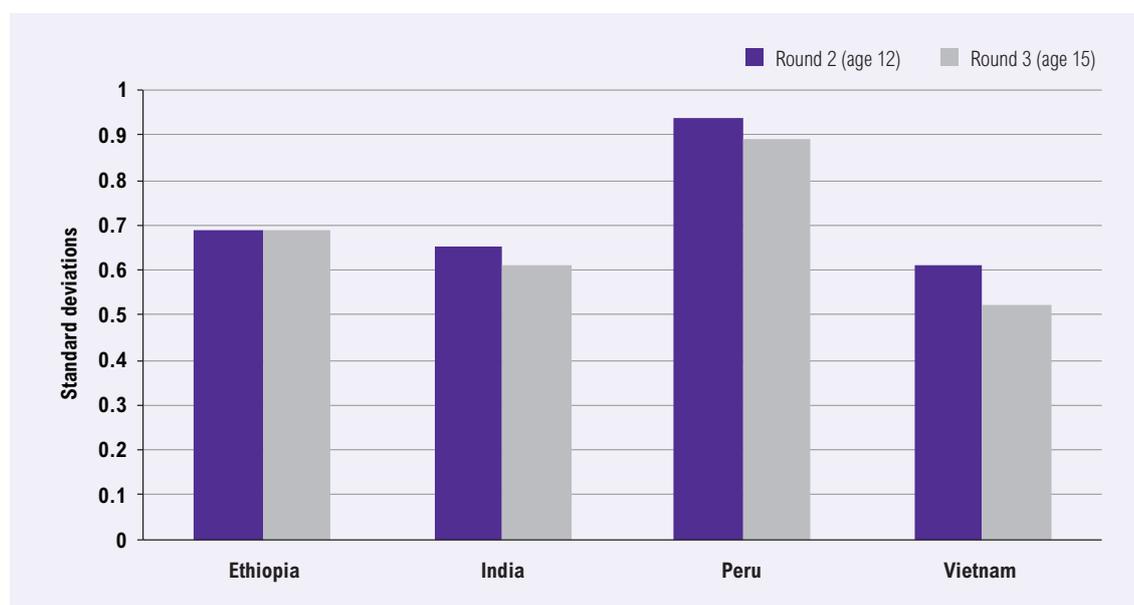
With Round 3 of Young Lives data collection in 2009–10 we are able to go beyond cross-sectional analysis of differences in educational outcomes to show how inequality gaps evolve over time. Figures 5 and 6 show that the gaps in cognitive development (measured by the Peabody Picture Vocabulary Test) for the Older Cohort between Rounds 2 and 3 have stayed relatively stable, suggesting that the gaps open up earlier in childhood and then plateau (Cueto et al. 2011).

Figure 5. Gaps in cognitive development between Older Cohort children in urban and rural locations, Rounds 2 and 3 (ages 12 and 15)



Source: Cueto et al. 2011.

Figure 6. Gaps in cognitive development between Older Cohort children whose caregivers completed secondary school and those whose caregivers did not, Rounds 2 and 3 (ages 12 and 15)

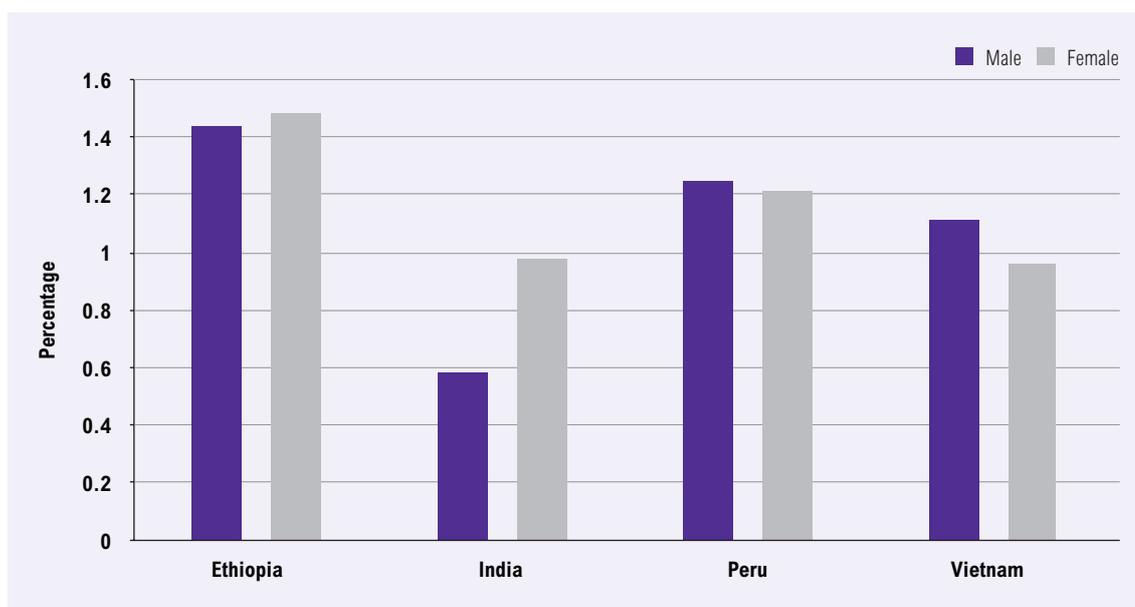


Source: Cueto et al. 2011.

Also drawing on the three rounds of data and focusing on cognitive skill development among the Older Cohort over that period, Rolleston and James (2011) found that while gaps in education outcomes relate to household level advantage in all four countries, disparities at the age of 12 were better explained by previous test scores (with no additional negative effect of wealth at that point). This suggests some compensatory effect of schooling, but also that early gaps were predictive of lower later performance. The same study found that the inequalities in education outcomes widened again during the later years of schooling, when pressures to drop out rise, especially because of rising costs (including opportunity costs of labour).

Aggregate statistics on education can obscure the gender dimensions of schooling. In all of the Young Lives study countries there is relative gender parity in enrolment, while education outcomes are also fairly even and at Round 3 girls in the Younger Cohort are doing marginally better than boys (Cueto. 2008; Cueto et al. 2011). However, once the data is further disaggregated by gender and 'extreme group' (children whose parents have lower education levels, lower household material wealth levels and live in a rural area) the gaps become apparent (see Figure 7). In India, for example, there were no significant differences in maths achievement between boys and girls in the Younger Cohort at the age of 8. But when disaggregated by gender and 'extreme group', the gap was almost twice as large for disadvantaged girls as it was for disadvantaged boys (Cueto et al. 2011).

Figure 7. Gaps in maths achievement between Younger Cohort children from 'extreme groups'* by gender at the age of 8 (2009)



*Refers to (1) children with lower parental education, lower wealth index and living in a rural location and (2) children with higher parental education, higher wealth index and living in an urban location.

Source: Cueto et al. 2011.

The Young Lives data also highlight that gender differences are complex and in some circumstances boys from poor households are at a greater educational disadvantage than girls from similar backgrounds. This may relate to the higher wage-earning potential of boys as they get older, or boys doing less well in exams (Pells 2011). Table 3 shows that in Vietnam more girls than boys within the Young Lives sample are in school at the age of 15, while the drop-out rate among boys in Vietnam is nearly a third higher than for girls. This disparity is intensified by poverty, with only 40 per cent of poor boys still in school at the age of 15 but 52 per cent of poor girls (ibid.). In Andhra Pradesh there is a slightly higher drop-out rate among

girls (15 per cent in comparison to 11 per cent among boys), yet poor girls are more likely to be in school than poor boys (ibid.). Meanwhile in Ethiopia the drop-out rate is lower for girls but primary school completion is higher for boys (Woldehanna et al. 2011).

Table 3. Percentage of 14–15 year olds enrolled in school in Vietnam (2009)

	Boys	Girls
Overall	72.2	80.0
Urban	86.0	90.6
Rural	69.1	77.7
Above poverty line	73.7	81.6
Below poverty line	40.0	52.0
Majority ethnic group	76.3	83.8
Minority ethnic group	46.0	54.7

Source: Pells 2011.

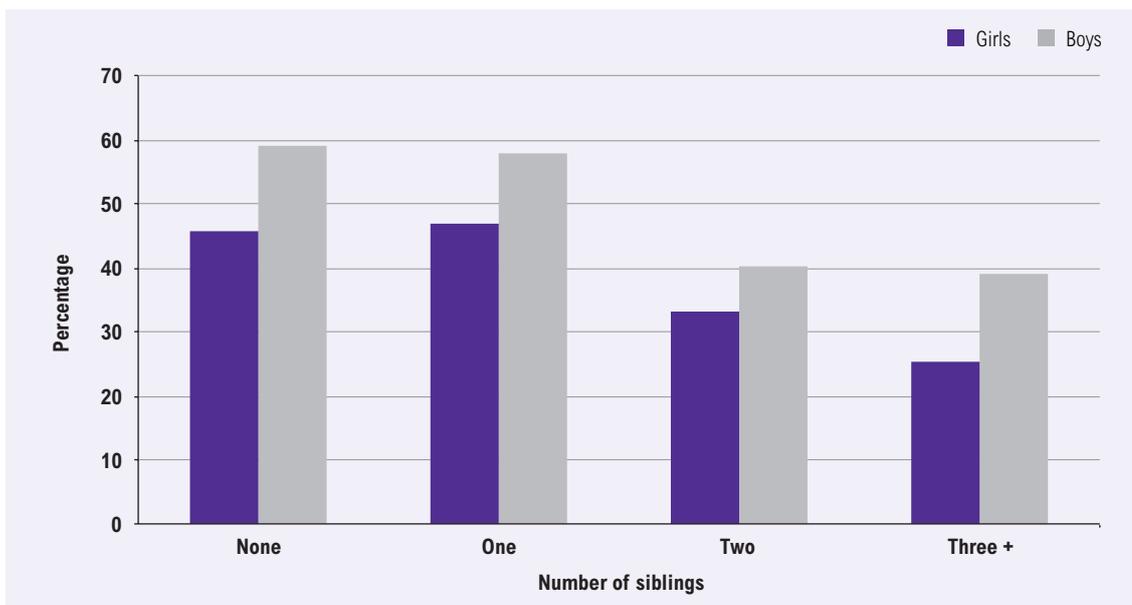
5.4 Patterns of low-fee private schooling in Andhra Pradesh

The last decade has seen dramatic growth in the low-fee private education sector in developing countries, and India provides a clear example. Trends towards private education relate to economic, political and ideological shifts, as well as reflecting perceived failure of the state to deliver quality education.

The findings presented here focus on access to private schooling in Andhra Pradesh rather than education quality or achievement in the private sector. In India, the Government is committed to supporting partnerships between public and private institutions in the provision of education, as expressed in the Right to Education Act (2009), which requires all state-recognised private schools to reserve 25 per cent of places for children from poor backgrounds. However, some argue that there remains a lack of clarity about how the Government intends to implement these partnerships (Srivastava 2010) and that it is the better-off among the poor who are most likely to benefit.

By comparing the Older Cohort aged 8 in Round 1 with the Younger Cohort aged 8 in Round 3, we see that the percentage of 8-year-old children in private schools increased from 24 to 44 per cent between 2002 and 2009. By 2009, children in urban areas were more likely to be educated in private schools, even among poorer groups. However, the chances of boys going to private schools rose faster than for girls, with a 9 per cent gap already evident by the age of 8 among the Younger Cohort, where previously the gap did not open up until the age of 10 in the Older Cohort. Earlier-born children in a family were more likely to attend a private school, suggesting parents are making ‘investment decisions’ from scarce resources (see Figure 8) (Woodhead et al. 2012).

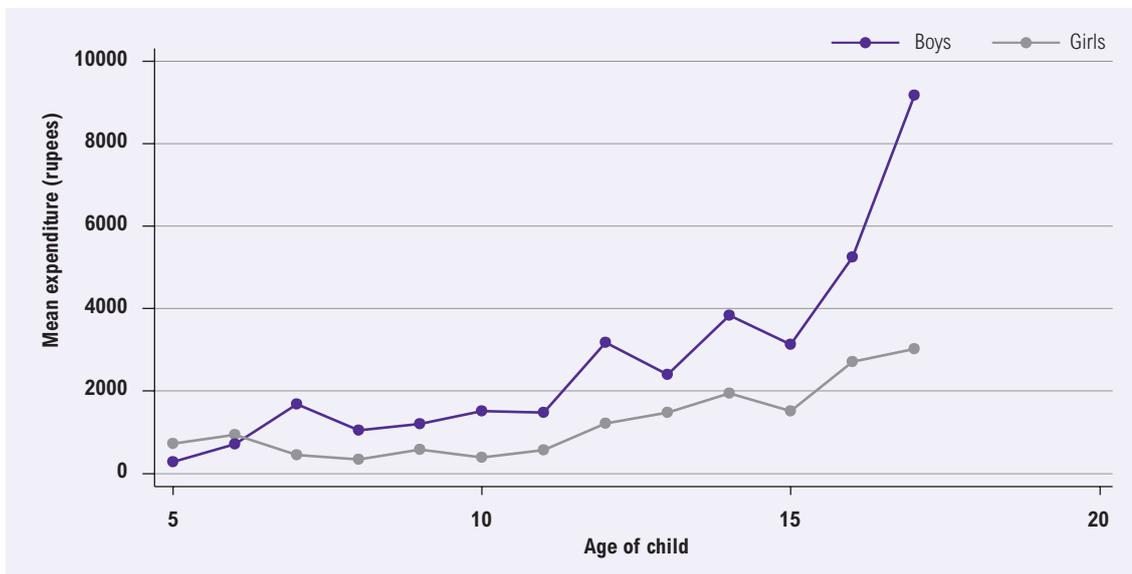
Figure 8. Percentage of Younger Cohort in Andhra Pradesh who have attended a private school by age 8, by gender and number of siblings (2009)



Source: Woodhead et al. 2012.

Figure 9 further illustrates the bias towards boys in education-related expenditure in Andhra Pradesh, showing how the gap between expenditure on boys and on girls increases as the children get older.

Figure 9. Mean expenditure on school fees and extra tuition, Andhra Pradesh, by gender and age of children (rupees)



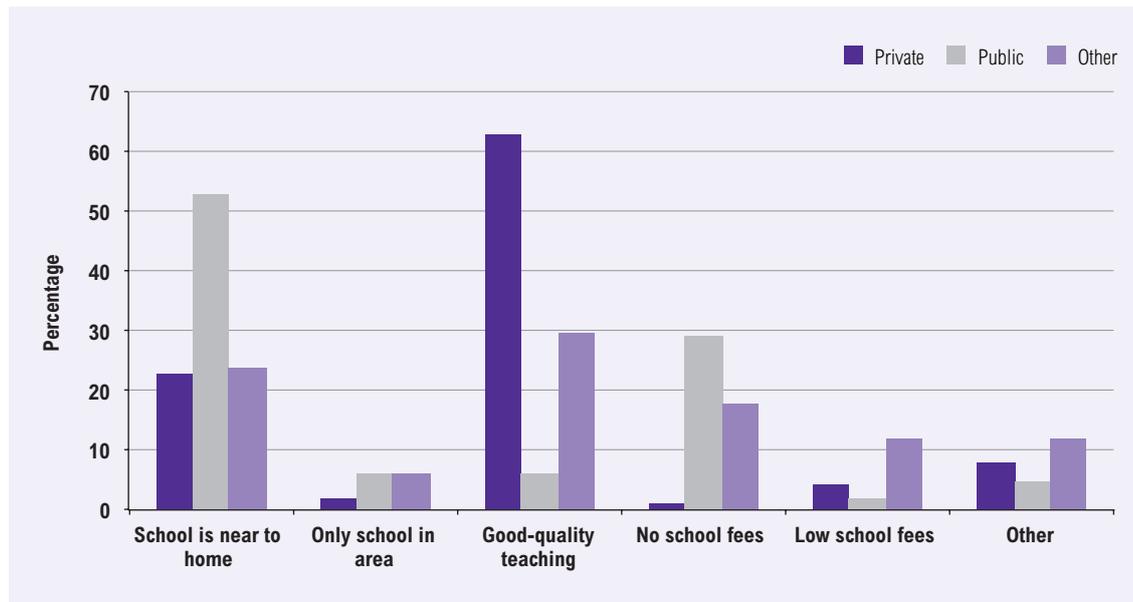
Note: Covers all children aged 5–17 in households of Young Lives Older Cohort children.

Source: Pells 2011.

Uptake of private education is also shaped by location and wealth. According to Young Lives data, the greatest factor affecting private school attendance was living in an urban area, despite the fact that every community included in the survey had a private school. However, the rural–urban gap is beginning to close: while 10 per cent of 7–8 year olds from rural areas were privately educated in 2002, by 2009 this had gone up to 31 per cent. Wealth inequalities were also substantial, indicating that poor children are less likely to attend private school (Woodhead et al. 2012).

In terms of reasons behind school choice, in Andhra Pradesh parents opting for private school education appear to be motivated by perceptions of better-quality teaching and care. This is mirrored in children's own perceptions about their performance in relation to other children in their class (irrespective of actual performance). Children in private schools are more likely to feel that they are performing well in comparison to other children ('good' or 'very good'), while children in public schools were more likely to feel that their performance is 'poor' or 'average' in relation to others (Woodhead 2010).

Figure 10. Main reason for choice of school in Andhra Pradesh for Younger Cohort at age 8 (2009) (%)



Source: Woodhead 2010.

These findings suggest that there has been a rapid increase in the uptake of private schooling in Andhra Pradesh since the beginning of the Young Lives survey in 2001. This, in turn, points to a crisis in public sector education provision, which is failing to meet parental expectations. Private sector participation has increased among groups who had not been using it (for instance poorer groups and those in rural areas); however, children from the most disadvantaged backgrounds are still less likely to access low-fee private schools than other groups, suggesting limits to the role of private education in contributing to the Education For All goals (Woodhead et al. 2012).

5.5 The importance of flexible schooling as a strategy for inclusion

This paper has outlined how poverty, location, parental education, ethnicity and gender intersect to reinforce potential disadvantages in education. Alongside these exclusionary factors is the inflexibility of schools to accommodate working children, or children who take time out of school because of illness or to look after sick parents. Young Lives research reveals that while most children currently combine (often unpaid) work and school, unresponsive school systems are making it harder for children to access school and stay there, despite the commitments and investment that families are making in their children's school education. The case of Shonah, mentioned previously in relation to factors in school drop-out, is a clear illustration of this. Shonah had dropped out of school when her mother fell ill to take on domestic duties. After her mother's death, Shonah also suffered from ill-health, which prevented her from progressing through the year.

[Shonah] was told by the school that she had to start Grade 1 [for the third time] at the beginning of the following year. She did and passed to Grade 2, ranked thirteenth in the class. However, she fell very ill with malaria in the second semester of Grade 2 and dropped out again. The school again denied her permission to return. When we met her, she was strong enough to engage in paid work on irrigated land and in household chores. She hoped to return to school in 2008/9, but would repeat the first semester. Shonah was well enough to attend school for substantial portions of the time she was not enrolled, but was not permitted to participate. Her stepmother said, 'I will send her back to school the coming year if God wills. I won't give up' (Orkin 2011: 22–3).

Round 3 data from Ethiopia shows that more than 90 per cent of the 8-year-olds and 98 per cent of the 15-year-olds were involved in some kind of work, paid or unpaid, in 2009. Caring for other children and doing household chores take up the highest share of children's time, followed by unpaid work within the family such as farming and herding cattle (Woldehanna et al. 2011). In Ethiopia, a comparison of 8-year-olds from the Older Cohort at Round 1 in 2002 and 8-year-olds from the Younger Cohort at Round 3 in 2009 shows that participation of 8-year-olds in paid work declined from 8 per cent in 2002 to 3 per cent in 2009. Among the 15-year-olds, 8.6 per cent were doing paid work in 2009 (ibid.).

In the qualitative sub-sample we are able to explore this in more detail and it would seem that children's work, which is mostly unpaid and for the household, is central to children's lives and becomes more skilled and responsible as they grow older (Heissler and Porter 2010). The data highlight the interdependence between generations of children, parents and grandparents, which, as well as helping to combat household adversity, can be central to children's sense of self-efficacy. It is also common for children's work to help cover the costs of their schooling (Boyden 2009; Tafere and Camfield 2009; Heissler and Porter 2010).

Teferi, a 12-year old in Ethiopia, likes his work because, 'First I earn money in it. Second, it makes me happy for having a job rather than staying at home the whole day ... I use [the job] to buy the necessary educational materials. I buy my shoes, bag and clothes.' Teferi's grandmother agrees that 'he's always thinking about ways through which he can rescue himself from such a miserable life and through which he can stand above his brothers in terms of educational status and living status'. (Boyden 2009: 17–18).

Also drawing on Young Lives data from Ethiopia, Orkin (2012) found that children had varying opinions about whether work and school were complementary or competitive. She identified a number of key characteristics including, critically, the flexibility (or not) of the school, as well as that of the employer. For example, a girls' focus group in Ethiopia described teachers allowing children to leave school early to go to do paid work, while a boys' focus group contrasted the difficulties of paid work with work for their parents: 'concerning the household work ... parents don't refuse to send you to school though you don't finish the work. You can finish the work after school. That is not the case with the paid work' (Orkin 2012). The importance of flexible schooling was further highlighted in qualitative data gathered for the school-based survey in Ethiopia in 2010.

Children in focus group discussions said that poor children in rural areas often only have two choices: they can drop out of school to allow them to work or they can work and go to school if these activities are flexible, but they cannot give up work. They said that shift schooling helped prevent drop-outs and that teachers needed to be more supportive of working children by providing extra tutorials for missed classes. Children who worked and went to school reported that this adversely affected their school work and that they did not envisage being able to stay in school unless they got more help. (Frost and Rolleston 2011: 14)

While Ethiopia has trialled some innovative approaches to flexible schooling, support for these kinds of approaches may be diminishing in the context of movements towards full-day versus shift schooling, as well as global pressures for eliminating 'child labour' beyond the existing focus on worst forms. In India, the Right to Education Act (2009) states that children must attend school and there is much policy effort towards removing children from work (Morrow et al. forthcoming). While many children and young people face difficulties in combining school and work, it is evident that a punitive approach to young people who work can become a further source of worry and stress (Morrow and Vennam 2009).

5.6 High educational aspirations and expectations for the labour market

Despite problems of school quality and rising opportunity costs of going to school as the children grow older, there are very high educational aspirations across the study countries, wealth quintiles, and among both girls and boys. Indeed, households invest in their children's education with a very clear rationale that they want to afford their children opportunities that they may not have had. In Andhra Pradesh, where 44 per cent of the Young Lives Younger Cohort attend a private school, this increasingly means paying for education, often from scarce resources. As one caregiver explained:

Nowadays most of the jobs are computer-based jobs. And for working with computers one needs good education. ... If we educate our children in good school they will get good jobs and this means getting a fat salary and leading a nice life. Moreover, they will not regret and blame us. We are struggling hard to meet both ends as we did not get good education and we don't want our children to suffer like us.

However, such high expectations ultimately demand results: is education really a route out of poverty? There is a growing sense if the implicit promises of education fail to deliver what people hope for, the gains made in expanding access to education over recent years may become increasingly fragile. The literature shows that for more than two decades young people in developing countries have had far higher aspirations for both education and occupations than young people in developed countries (for example, see Little 1978). A recent tracer study in Sri Lanka by Little also found that young people who had once held high educational aspirations and who had not realised them, nonetheless held very high aspirations for their own children or the children they hoped to have one day (2012). This is reflected in the Young Lives study, where both children and their caregivers have high aspirations for their futures, despite, or because of, their current circumstances.

For example, an analysis of career aspirations among the Older Cohort at the age of 15, found that over 80 per cent of 15-year-olds in the Ethiopia survey aspired to jobs that required a university education, as did 75 per cent in India and Vietnam, and 60 per cent in Peru. Given levels of economic opportunity and participation, these aspirations may not be realistic, but they certainly counter the argument that poorer children do not aspire to a better future (see, for example, Appadurai 2004). Young people in urban areas had higher aspirations than those in rural areas, with the exception of Ethiopia where aspirations were similarly high in both locations. Looking at gender differences among 14–15-year-olds, Pells (2011) found that while boys had higher aspirations for completing university than girls in Andhra Pradesh (and minimally higher in Ethiopia), it was the other way around in Vietnam with more girls aspiring to complete university than boys. Rolleston and James (2011) also found that the greatest gender

differences in aspirations were in Vietnam, where 78.6 per cent of girls aspired to careers that required higher education, compared to 63.2 per cent of boys.

Barriers to attending formal education beyond 10th grade (when formal exams happen in the Indian system), together with poor-quality schooling and a lack of vocational training available, mean that children and young people may be consciously keeping their options open by learning the manual skills needed for agriculture or trade: “If I fail in my pre-college, that is in 11th class, then I will not sit idle at home, I will go to do the work and earn” (male, 16 years old, quoted by Rolleston and James 2011). The qualitative data reveal that despite reported high aspirations, many young people feel that education is not a dependable route to employment and that their primary concern is still one of survival:

As it is, one is not sure of getting an employment after completion of education. We are not sure of getting a job. So we cannot depend on one source for employment alone. We have to take up studies and work simultaneously during holidays. If we do these two things at a time maybe we will be able to do some work to survive even in case we don't get a job. We can do one of these jobs and earn a living. We can also have some confidence in us that we can take up one of these jobs and survive. If we depend totally on education alone we will not be able to do any work in case we don't get a job. (male, age unknown, Andhra Pradesh, quoted by Rolleston and James 2011)

Conclusions and policy discussion

Though an important first step, expanding school enrolment does not, on its own, enable education to fulfill its transformational potential. School access, progression, and outcomes remain strongly shaped by household factors. Educational inequalities are set in motion in early childhood and tend not to reverse, while gaps in achievement relating to location, ethnicity, wealth, parental education, and gender persist throughout children's school trajectories. For school education to start fulfilling its promise as a route out of poverty, there is a need for decisive strategies for equitable and quality schooling that translate into broader opportunities for young people. Unless such strategies are pursued, there is a danger that the gains of the last decade may not be sustained.

This paper provides a synthesis of existing Young Lives research on education inequalities across the four study countries, relating to questions of access and achievement. While the paper does not address the dimension of schooling quality, it highlights the stark achievement gaps between different groups, which need to be a central consideration in strategies for improving education quality. The key findings included in this paper, and their policy implications, are set out below.

- **Unequal school trajectories are set in motion in early childhood**

The Young Lives evidence shows that inequalities in education start early – before entry into primary school – and that once set, they tend not to reverse as the children get older. This longitudinal perspective highlights the importance of getting things right from the start as the foundation for later achievement. Nutrition levels in early childhood and attendance at pre-school are important factors in later educational outcomes, while late entry into primary school affects grade progression and drop-out rates. The Young Lives findings not only underline the importance of the provision of high-quality ECCE but also

reveal clear inequalities in children's access to ECCE programmes across all four of the study countries. Inadequate and poor-quality service provision combined with insufficient attention to marginalised groups, mean that ECCE is not fulfilling its promise for poor children. In order for ECCE to contribute effectively to wider education goals and live up to its potential as a strategy for long-term poverty reduction, improving early years intervention for poor and marginalised groups needs to be urgently addressed at the policy level.

- **Intersecting inequalities create the biggest disadvantages in education**

The Young Lives data show that despite high enrolment and relative gender parity across the study countries (Ethiopia, Andhra Pradesh in India, Peru and Vietnam) inequality in education persists in all four contexts for a number of reasons. The biggest gaps relate to geographic location, household poverty, ethnicity/language, levels of parental education and gender. Most importantly, however, it is where these inequalities intersect that children become most disadvantaged in terms of school access, progression and outcomes. This needs to be taken into account in the development of plans for reaching marginalised children, by addressing broader sources of exclusion such as rural location, household poverty and levels of parental education, as well as focusing on the needs of specific groups such as girls or ethnic minorities.

- **High enrolment but stark inequalities in children's progression through school**

There is close to 100 per cent primary school enrolment among the Young Lives Younger Cohort in Andhra Pradesh, Peru and Vietnam, reflecting major policy successes. In Ethiopia there has also been an impressive increase in enrolment among the Younger Cohort at the age of 8 (compared to the Older Cohort when aged 8). However, this is not the end of the 'access' story. If access to education is understood to mean more than simply school registration, then attendance, grade progression, school completion, and drop-out continue to be important challenges in each of the four study countries and are strongly shaped by household-level factors. For example, in Ethiopia, just 18 per cent of the Older Cohort had completed primary school at the age of 15, despite 90 per cent still being enrolled in school. The rural drop-out rate (12 per cent) was three times as high as in urban areas (4 per cent) while children from poorer households (9 per cent) and those with mothers with no education (11 per cent) were also more likely to drop out.

- **Achievement gaps are strongly shaped by household-level factors**

The stark achievement gaps that exist between different groups need to be a central consideration for education quality improvement strategies. Across all four of the study countries, learning outcomes are shaped by group-based inequalities relating to gender, wealth, ethnicity/language, rural/urban location and level of parental education. The greatest gaps in children's skill development appear at the points at which they enter and leave school. While certain gaps narrowed at the age of 12 when most children are in school, suggesting some compensatory effect of schooling, we find that early inequalities tend to persist throughout children's school trajectories. Achievement gaps relating to location and parental education stayed relatively constant for the Older Cohort across 3 rounds of data collection (2002–9), suggesting that the 'damage' is done early and then plateaus.

- **Patterns of low-fee private schooling in Andhra Pradesh have equity implications for children**

There has been a dramatic rise in the number of parents choosing low-fee private schools over government schools since Round 1 of Young Lives data collection in Andhra Pradesh in 2002. Children in urban areas are now more likely to be educated in private schools than government schools, and this is true even for poorer groups. The urban–rural gap is also beginning to close: while 10 per cent of Young Lives 7–8 year olds from rural areas were privately educated in 2002, by 2009 this had gone up to 31 per cent. However, the additional cost burden on poor families means access to private schooling (and its perceived benefits) is not equally shared. Children from the most disadvantaged backgrounds are not accessing private education at all, while the gap in expenditure between boys and girls is substantial and increases as the children get older. While pointing to a crisis in public sector education provision, which is failing to meet parental expectations, these findings also suggest limits to the role of private education in contributing to the Education For All goals.

- **Inflexible schooling further excludes the poorest children**

The majority of children in the Young Lives sample balance work and school and inflexible schooling is a contributory factor in excluding some of these children from school, particularly girls and children from poorer groups. In Ethiopia, children are also being prevented from progressing through school because of their own ill-health or that of their parents when it results in increased domestic responsibilities. In recognition of these challenges, policymakers should question connecting global education goals with campaigns for eliminating child labour, beyond the existing focus on worst forms. Rather than taking a punitive approach to working children, possibilities for more flexible and responsive schooling need to be examined, for example, seasonal timetables and shorter-day schooling. Future strategies should be in keeping with principles of inclusive education to bring marginalised children into mainstream education.

- **High education aspirations persist but for how much longer?**

Young Lives research reveals persistently high educational aspirations among even the poorest children and their families. The majority of the Older Cohort aspires to careers that require a university education. Despite global development promises that hold up education as a route out of poverty, many of these young people will be disappointed. Indeed, the qualitative data reveal an acute awareness of this fact as children and young people highlight the importance of developing skills through paid and unpaid work, alongside their schooling. In order for education to start fulfilling its promise as a route out of poverty, there is a need for better-quality, more equitable schooling that can translate into realistic opportunities for young people. Without decisive strategies for improving equity in education, the quality of the education children receive and the study, training and employment opportunities available to all children after formal schooling, the transformational potential of education will be lost

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