

# Education and Learning:

## Preliminary Findings from the 2016 Young Lives Survey (Round 5): Ethiopia

**This fact sheet presents findings from the fifth round of the Young Lives survey in 2016. Young Lives has followed two cohorts of children, born seven years apart. This fact sheet gives a snapshot of key education indicators for 15-year-olds in 2016 (Younger Cohort) and compares that to the data for 15-year-olds in 2009 (Older Cohort) to show changes in children's education over that 7-year period. Despite a significant increase in school enrolment for both boys and girls, grade progression often remains slow, especially for children from rural sites and poorer households. Moreover, there are large disparities in learning levels between children from different socio-economic groups, as measured by maths and vocabulary tests.**

### Key Findings

- Over time, enrolment has increased for 15-year-olds (comparing the Younger Cohort in 2016 to the Older Cohort in 2009) by three percentage points (from 90% to 93%).
- With age, enrolment of Younger Cohort children fell slightly between the ages of 12 and 15 from 95% to 93%. Girls were slightly more likely to remain enrolled in school than boys at the age of 15 (94% for girls versus 92% for boys).
- Children from the poorest households and those from rural sites are making the slowest progress through grades. At age 15, when they are expected to be in Grade 7 or 8, children on average have only completed Grade 5 or 6. Those progressing well come mainly from households whose caregiver had more than eight years of education, belong to the wealthiest households, and live in Addis Ababa. Girls are also more likely to have reached a higher grade level compared to boys.
- The majority of those enrolled at age 15 were in public schools (93%) compared to only 6% in private schools. Private school enrolment is highest among children whose caregiver has more than eight years of education and among children from the wealthiest households.
- The rapid increase in enrolment has not been matched by improvements in learning levels which fall short of national targets. Children from better-off households, with caregivers who have completed primary school, and those living in urban sites, perform better in tests of maths and vocabulary.

## The policy context for education in Ethiopia

Over the last 15 years, the Ethiopian government has made significant efforts to achieve universal education by rapidly increasing access to free primary education for all children and launching large-scale public awareness campaigns to promote school attendance. As a result, there has been unprecedented growth in enrolment in primary education: net enrolment in Grades 1–8 has risen from 54% in 2002–3 to 94% in 2014–15 (Ministry of Education 2015, p.44).

However, the quality of learning has not necessarily improved (Woodhead et al. 2017). Many children in the early grades are not learning as expected and some are unable to read a single word. Also, in 2014–15 the completion rate of Grade 8 was 51% and the repetition rate for Grades 1 to 8 was 7%, both far short of the 2014–15 national targets of 79% and 1%, respectively (Ministry of Education 2015, pp.10-11).

Starting primary school without having attended pre-school has been singled out as a major obstacle for progress (Woldehanna and Araya 2017). Consistent with the Sustainable Development Goals (SDGs), the government has set out a target to increase access to pre-school. In the second Growth and Transformation Plan (GTP II), the government states that the gross enrolment rate for pre-school will be scaled up to 80% by 2019–20 so that children enter Grade 1 well prepared.

## School enrolment, school type and progress through school

**Enrolment:** 93% of the Younger Cohort 15-year-olds were enrolled in school in 2016 compared to 89% of the Older Cohort children when they were 15 in 2009. In both cohorts, girls are slightly more likely to be enrolled than boys when they reach age 15, probably because boys engage in economic activities more than girls at this age. Urban enrolment rates were high among 15-year-olds in 2009 (98%) and did not change between 2009 and 2016. For 15-year-olds living in rural sites, there was an improvement of six percentage points over the period 2009–16 (see Table 2). Moreover, while enrolment of children from better-off households remains near universal, enrolment rates of children from the poorest households improved from 83% in 2009 to 91% in 2016. Furthermore, while enrolment in Addis Ababa sites is almost universal (99%), it is 87% in Tigray sites; this might be because the latter are particularly poor relative to regional and national averages and children are often engaged in work (Woldehanna and Gebremedhin 2015). Despite these concerning geographic differences, access to education became more pro-poor over the period 2009–16.

**Private schooling:** Although the 1994 Education and Training Policy encourages the establishment of private institutions of learning from kindergarten to tertiary levels, enrolment in private primary schools is low nationally and highly skewed towards urban sites and children from better-

off families. According to Young Lives data, 93% of 15-year-olds enrolled were in public schools compared to 6% in private schools and only 1% in community schools. Private school enrolment is highest among children whose caregiver has more than eight years of education (32% compared to less than 1% of children whose caregiver has no education) and among children from the wealthiest households (16% compared to 0% among the poorest children). The proportion of children attending private school has not changed between 2009 and 2016.

**Grade progression:** Overall, progression through school is slow in Ethiopia, with high rates of pupils over-age for their grade in school. By age 15, children are expected to have completed Grades 7–8. However, the data show children are falling behind their 'normal' grade, with most having completed only Grade 5 or 6. There is a strong association between family circumstances and grade advancement. Children progressing at the right pace come mainly from urban households, with caregivers with more than eight years of schooling, belong to the wealthiest households, and live in Addis Ababa (see Table 1). Boys are more likely to be over-age for their grade compared to girls. The incidence of being over-age for grade in Southern Nations, Nationalities, and Peoples' Region (SNNP) is the highest among all regions. Children in SNNP have a high enrolment rate of 97% at age 15 but had only completed Grade 4. This delay is explained by children starting Grade 1 late, with only 54% being enrolled when they were 7–8 years old.

**Table 1. Children over-age for grade in school (%)**

	12-years-old		15-years-old	
	2006 (Older Cohort)	2013 (Younger Cohort)	2009 (Older Cohort)	2016 (Younger Cohort)
<b>Gender</b>				
Female	42.6	37.4	53.8	42.1
Male	49.6	41.9	61.8	49.6
<b>Caregiver education</b>				
None	49.4	46.7	61.5	53.7
More than 8 years	23.2	16.7	38.2	18.4
<b>Wealth index</b>				
Bottom tercile	64.9	68.6	74.4	76.0
Top tercile	22.9	16.4	37.9	21.3
<b>Location</b>				
Rural	58.0	54.2	68.9	61.1
Urban	24.4	13.3	37.9	18.6
<b>Sites in region</b>				
Addis Ababa	17.8	10.7	31.6	14.9
Amhara	41.7	37.5	57.4	44.4
Oromia	58.7	54.4	65.4	60.3
SNNP	57.7	70.7	75.7	76.9
Tigray	45.4	8.6	46.8	14.8
<b>Average of all children</b>	46.2	39.8	58.0	46.0
<b>Number of children</b>	710	1,672	690	1,623

## Learning outcomes

Learning levels have not increased in tandem with enrolment. Comparing 15-year-old children who correctly answer comparable maths questions in 2009 and 2016 reveals that there has been no overall improvement in learning levels (see Table 2)<sup>1</sup>. On average, more than a third of 15-year-olds were unable to answer any of the questions correctly in both 2009 and 2016. While there is a minor gender difference across Younger Cohort performance, maths test scores vary for children of different social groups. In 2016, half of the poorest children did not answer any of the maths questions correctly compared to 21% of the better-off children. Similarly, 41% of children whose caregivers had no schooling, and 41% living in SNNP sites were unable to answer any of the questions correctly, compared to 18% of children whose caregivers completed Grade 9, and 7% of children living in Addis Ababa sites. While these results are based on a simple test of three comparable questions, a fuller maths test of 30 questions administered to the Younger Cohort in 2016 reveals very similar disparities.

In terms of the vocabulary tests, there is an expected increase in correct responses of Younger Cohort children as they got older between ages 12 (70%) and 15 (76%).<sup>2</sup> As with maths test scores there is virtually no difference between boys' and girls' scores, but considerable disparities between socio-economic groups. 15-year-olds from the poorest households scored lower (64%) in the test compared to those from the wealthiest households (86%).

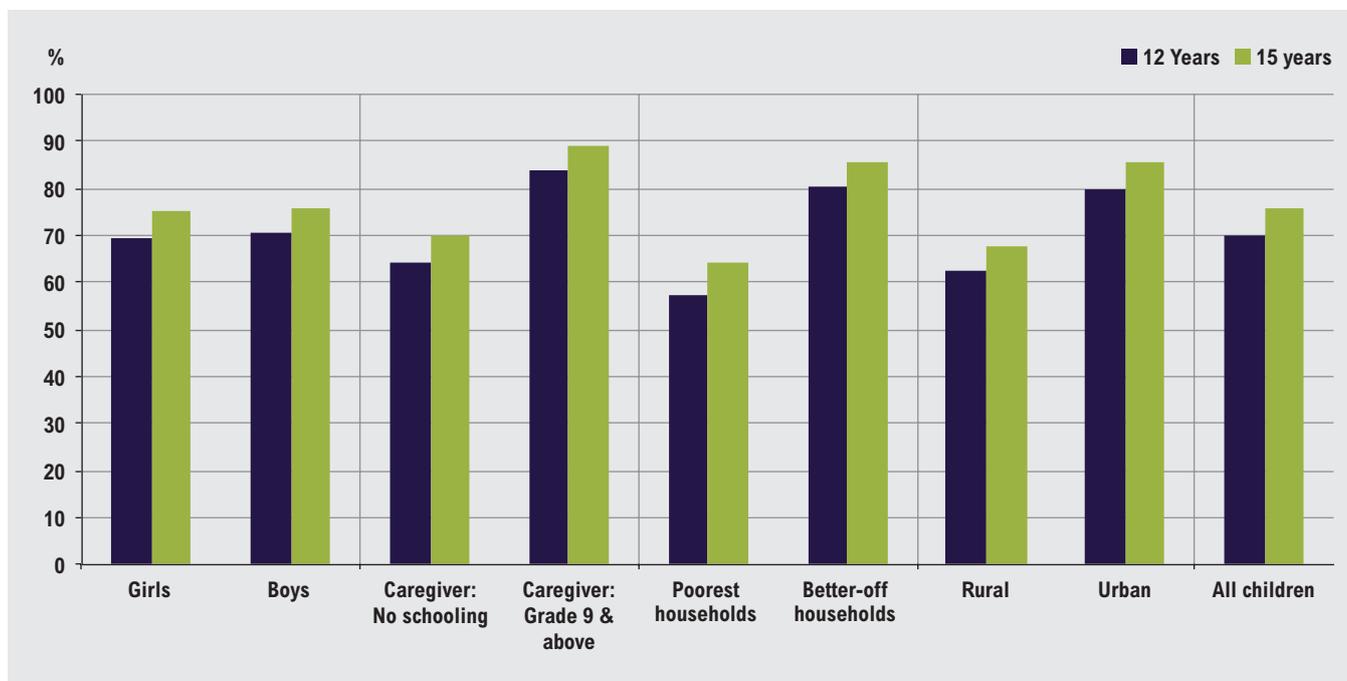
## Conclusions: from access to learning

Access to primary school has improved rapidly over the last 15 years. In the Young Lives survey, near universal coverage now exists for children with educated caregivers and those from better-off households, notably in urban sites. 93% of the Younger Cohort children were enrolled in school in 2016, slightly lower than when that cohort was 12-years-old in 2013 (95%), which could be the result of family economic needs and/or poor academic achievement as early as elementary school.

Despite the growth in enrolment, children are falling behind their expected grade. Progression through school seems to be a major problem, with Younger Cohort children lagging behind by two or three grades. As indicated by maths and vocabulary test scores, learning levels are often low with considerable inequality among children from different socio-economic groups.

All this suggests that an important priority for the schooling system should be to promote reforms that improve quality of education to ensure children obtain the required knowledge, skills and values in their respective grade levels.

**Figure 1. Results of vocabulary test scores over time, Younger Cohort (%)**



<sup>1</sup> The maths tests administered in 2009 and 2016 to 15-year olds are not identical. For this purpose, we have selected 3 maths questions administered in both tests to compare how children's performance has changed over time. The three questions test children's ability in terms of: (1) two-digit division, (2) reading a pie chart, and (3) solving a problem.

<sup>2</sup> Identical vocabulary tests were administered to children at the ages of 12 and 15.

**Table 2. Schooling and learning outcomes of 15-year-old children in Ethiopia**

	Children enrolled in school (%)		Highest grade completed (grade level)		Children who can correctly solve: "45÷15" (Q1)		Children who can read a pie chart correctly (Q2) (%)		Children who can approximate annual sales from weekly data (Q3) (%)		Children who can correctly answer all questions (Q1, Q2 & Q3) (%)		Children who did not answer any of the questions correctly (Q1, Q2 & Q3) (%)		Average score in maths test of 30 questions (% correct)	Number of children	
	2009	2016	2009	2016	2009	2016	2009	2016	2009	2016	2009	2016	2009	2016	2016	OC in 2009	YC in 2016
<b>Gender</b>																	
Female	90.6	94.1	5.6	5.9	33.7	43.5	29.4	29.0	19.4	23.5	2.9	4.9	41.4	35.9	30.3	362.0	837.0
Male	87.8	91.5	5.2	5.6	45.4	44.4	35.3	28.9	23.2	22.9	5.7	4.3	32.2	35.8	30.6	411.0	942.0
<b>Caregiver education</b>																	
None	86.7	89.3	5.1	5.3	35.0	35.7	30.8	27.2	20.6	20.8	4.5	3.0	41.0	41.1	27.2	375.0	930.0
1–4 years	88.6	94.6	5.3	5.7	40.4	42.9	28.5	28.7	18.0	19.7	3.5	3.7	39.0	37.6	30.2	237.0	411.0
4–8 years	94.3	97.0	6.1	6.4	44.0	56.1	39.0	28.8	30.0	26.9	4.0	4.9	27.0	27.7	33.9	105.0	272.0
More than 8 years	98.2	100.0	6.7	7.3	60.7	71.2	48.2	39.1	25.0	38.5	7.1	14.7	16.1	17.9	43.5	56.0	163.0
<b>Wealth index</b>																	
Poorest tercile	83.1	91.0	4.4	4.5	28.7	27.1	25.4	24.8	20.1	17.7	3.3	2.1	46.3	49.6	24.1	266.0	586.0
Middle tercile	85.6	89.7	5.2	5.7	34.6	37.2	29.5	27.9	16.0	20.2	3.4	2.5	43.5	38.7	28.7	250.0	586.0
Least poor tercile	98.8	97.3	6.6	7.1	55.1	66.1	42.2	33.3	27.7	31.0	6.3	8.8	21.1	20.8	38.0	256.0	585.0
<b>Location</b>																	
Rural	85.0	90.5	4.8	5.1	32.5	29.8	27.2	26.5	19.1	18.8	3.9	2.0	43.8	45.9	25.0	519.0	1183.0
Urban	97.6	97.0	6.6	7.1	54.0	70.8	42.9	33.7	25.8	31.6	5.2	9.3	22.6	16.9	38.1	254.0	596.0
<b>Sites in region</b>																	
Addis Ababa	99.0	99.2	7.0	7.3	52.5	84.6	42.6	39.8	28.7	34.9	4.0	12.0	22.8	7.1	46.3	101.0	244.0
Amhara	84.8	93.6	5.5	5.7	41.5	45.4	27.7	35.3	24.5	24.6	3.8	4.5	37.7	30.0	29.8	166.0	355.0
Oromia	87.9	90.2	4.8	5.2	28.7	40.1	30.7	25.4	16.7	20.4	3.3	1.7	44.7	38.8	27.0	157.0	359.0
SNNP	91.1	94.8	4.7	4.5	36.4	27.2	24.4	23.6	19.3	18.7	3.4	2.8	41.5	50.6	26.7	191.0	451.0
Tigray	86.1	87.3	5.8	6.8	44.7	38.0	42.1	24.9	20.4	21.7	7.2	4.0	30.9	41.1	27.8	158.0	370.0
<b>Average of all children</b>	<b>89.1</b>	<b>92.7</b>	<b>5.4</b>	<b>5.8</b>	<b>39.8</b>	<b>43.9</b>	<b>32.5</b>	<b>29.0</b>	<b>21.4</b>	<b>23.2</b>	<b>4.3</b>	<b>4.5</b>	<b>36.6</b>	<b>35.9</b>	<b>30.5</b>		
<b>Number of children</b>	<b>772</b>	<b>1,745</b>	<b>766</b>	<b>1,776</b>	<b>738</b>	<b>1,650</b>	<b>738</b>	<b>1,650</b>	<b>738</b>	<b>1,650</b>	<b>738</b>	<b>1,650</b>	<b>738</b>	<b>1,650</b>	<b>1,643</b>	<b>773</b>	<b>1,779</b>

## REFERENCES AND FURTHER READING

Ministry of Education (2015) *Education Statistics: Annual Abstract, 2007 E.C. (2014/15)*, Addis Ababa: Ministry of Education of Ethiopia

Woldehanna, T. and Araya, M. (2017) *Early Investment in Preschool and Completion of Secondary Education in Ethiopia: Lessons from Young Lives*, Working Paper 168, Oxford: Young Lives.

Woldehanna, T. and Gebremedhin, A. (2015) *Is Child Work Detrimental to the Educational Achievement of Children? Results from Young Lives in Ethiopia*, Working Paper No. 140, Oxford: Young Lives.

Woodhead, M., Rossiter, J., Dawes, A. and Pankhurst, A. (2017) *Scaling-up Early Learning in Ethiopia: Exploring the Potential of O-Class*, Working Paper 163, Oxford: Young Lives.

## ACKNOWLEDGEMENTS AND CREDITS

The Young Lives household and child survey was carried out in Ethiopia between early October 2016 and mid-February 2017. This fact sheet was written by Tassew Woldehanna, Mesele Araya and Alula Pankhurst. We would like to thank our fieldwork teams, and Chanie Ejigu and Abraham Alemu who coordinated the survey fieldwork, Meseret Gebreselassie, the Young Lives Data Manager, and Kristine Briones, Patricia Espinoza, and Marta Favara for support with data analysis. In particular, we thank the Young Lives children and their families for their willingness to be part of our sample and answer our many questions.

The views expressed are those of the author(s). They are not necessarily those of, or endorsed by, Young Lives, the University of Oxford, DFID or other funders.

Photo credit: © Young Lives / Antonio Fiorente. The images throughout our publications are of children living in circumstances and communities similar to the children within our study sample.



Young Lives is core-funded by UK aid from the UK Department for International Development

Young Lives is an international study of childhood poverty, following the lives of 12,000 children in four countries (Ethiopia, India, Peru and Vietnam). In Ethiopia, Young Lives is in partnership with the Ethiopian Development Research Institute (EDRI) and Pankhurst Development Research and Consulting Plc.