

Young Lives Ethiopia School Survey 2012–13

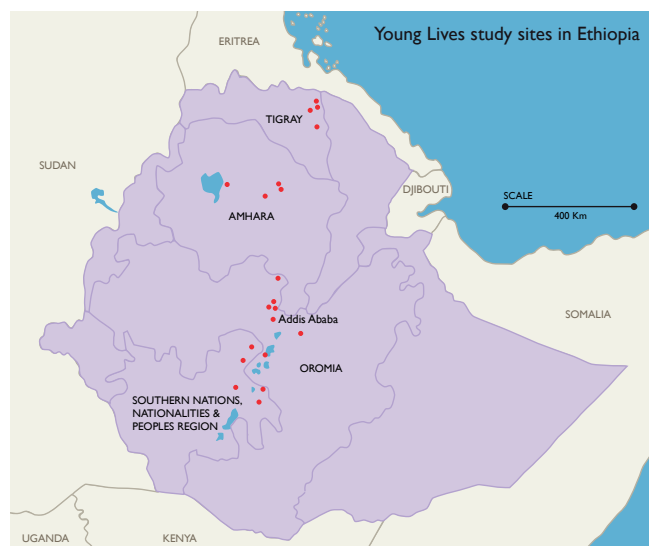
In 2012–13 Young Lives conducted a survey of nearly 12,000 pupils studying in Grades 4 and 5 in 30 sites located across seven regions of Ethiopia. The survey offers a unique perspective on regional and site differences in pupil, teacher and school characteristics and the factors influencing pupil progression and learning in mathematics and reading comprehension over the course of a single school year. This summary provides an overview of the highlights of the baseline descriptive report of the data, suggesting areas of potential interest to policy makers and areas for more detailed further research.

Survey overview

Young Lives is a unique longitudinal study of childhood poverty which has been conducted in Ethiopia since 2002, tracing the lives of 3,000 children in two age-cohorts through regular household surveys, qualitative studies and school-based surveys. The core Young Lives household surveys take place across 20 sites, selected to represent the diversity of each of the five study regions: Addis Ababa, Amhara, Oromia, SNNP and Tigray.

The 2012–13 school survey included all pupils (both Young Lives cohort children and non-Young Lives children), studying in all Grade 4 and Grade 5 classes in all schools located within the geographic boundaries of each survey site. In addition, pupils studying in Grades 4 and 5 in schools in ten new sites in the regions of Afar and Somali were surveyed, to enhance the scope of the research and include schools serving pastoralist communities. The 30 survey sites are shown in Figure 1.

Figure 1. Young Lives study sites in Ethiopia



The survey was conducted in two ‘waves’: Wave 1 at the beginning of the 2012–13 school year in October, and Wave 2 towards the end of the 2012–13 school year in May. At Wave 1, the survey included pupil questionnaires and assessments of maths and reading comprehension, teacher questionnaires and assessments, a questionnaire for principals, school observation and the collection of administrative data. At Wave 2, pupils completed a second set of learning assessments in maths and reading comprehension, and fieldworkers collected administrative data on pupil and teacher absenteeism and retention.

The survey sample is summarised in Table 1. A total of 94 school sites (both main and satellite campuses) and 280 classes (142 Grade 4 and 134 Grade 5) were surveyed. At Wave 1, the survey included 11,982 pupils, of whom only 10,068 (84%) were also present at and participated in Wave 2. Roughly equal numbers of boys and girls are included in the sample, with some slight variation by region.

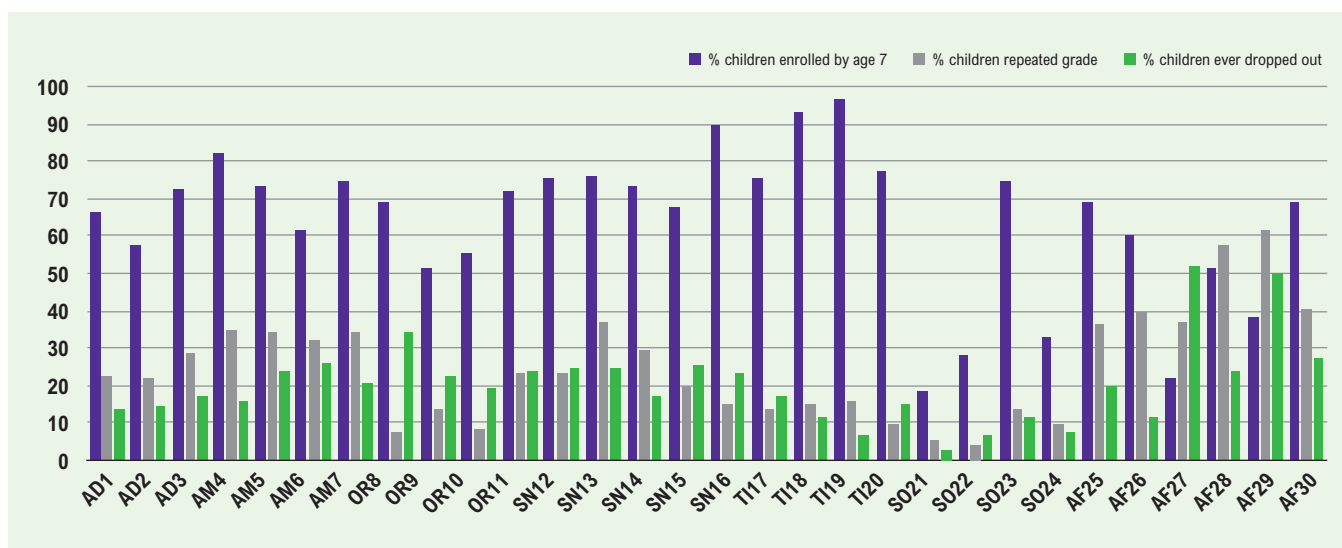
Table 1. Survey sample

Region	Number of sentinel sites	School sites	Classes			Pupils	
			Grade 4	Grade 5	Total	Wave 1	Wave 2
Addis Ababa sites	3	12	26	21	47	2,297	1,987
Amhara sites	4	13	19	13	32	1,232	953
Oromia sites	4	8	14	12	26	1,116	927
SNNP sites	5	20	32	35	67	2,869	2,419
Tigray sites	4	13	19	21	40	1,792	1,608
Somali sites	4	19	22	18	40	1,475	1,187
Afar sites	6	9	14	14	28	1,201	987
Total	30	94	142	134	280	11,982	10,068

Pupil’s educational status and history

On average, pupils enrol in school at 6.9 years of age (7.1 in government schools and just 5.8 in the non-government sector). This suggests that age of enrolment is roughly in line with the policy-mandated school-start age of 7. However, there is variation both between and within regions and between school types. For example, while only 61% of children in the Oromia sites are enrolled by the age of 7, 89% of children in the Tigray sites have enrolled in school by this age. Further, in selected sites in Somali and Afar pupils in government schools do not enrol on average until after the age of 9, two years after the expected enrolment age. However, there is no clear urban/ rural divide on age of enrolment.

Figure 2. Percentage of children enrolled by age 7 who have repeated a grade, and who have dropped out, by site



There is similar variation in grade repetition, and drop-out is also evident, as illustrated in Figure 2. Across the entire sample, nearly a quarter of pupils have repeated a grade, and just under one-fifth of pupils have dropped out. Both of these phenomena are particularly prevalent in the Afar sites, where two-fifths of pupils report repeating a grade, and just under a quarter of pupils report dropping out. By contrast, repetition and drop-out are lowest in the Somali region, at 13% and 11% respectively.

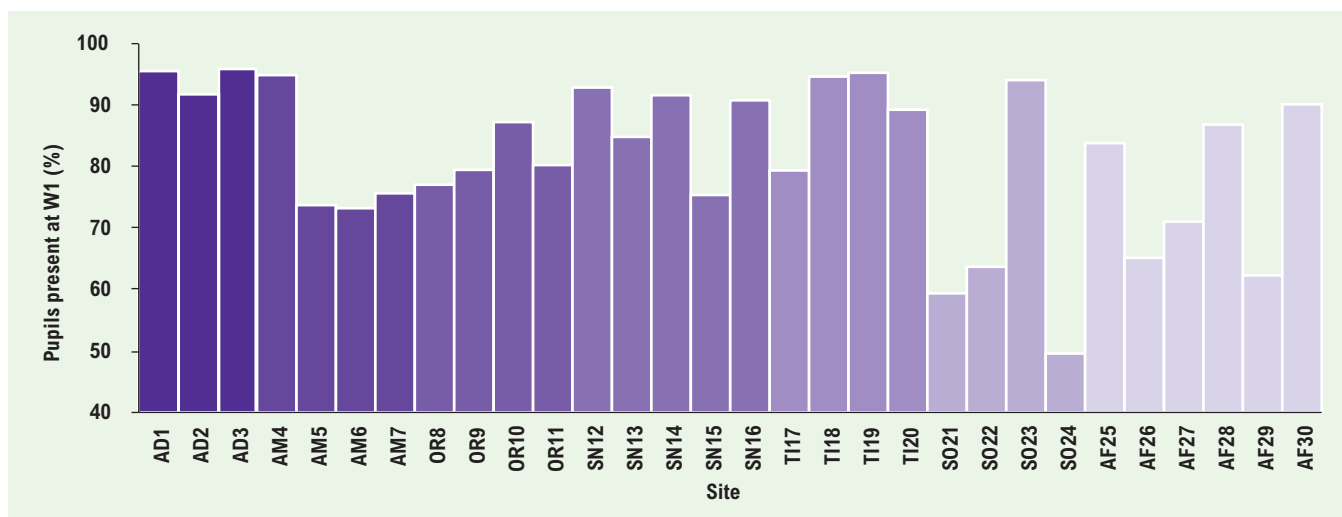
Seventy per cent of survey pupils learn in their mother tongue, a rate that is linked strongly to regional policies, as shown in Table 2. For example, in SNNP, the most linguistically diverse survey region, 68% of the Grade 4 pupils and almost none of the Grade 5 pupils were learning in their mother tongue. In Grade 4 this probably relates to the inclusion of English-medium non-government schools in urban survey sites, as well as to the more general linguistic diversity of the region. In Grade 5, schools typically shift to instruction in English, following regional policy, so that very few pupils continue to learn in their mother tongues.

Similarly in Afar, where the language of instruction is officially Amharic, only 47% of pupils across the two grades learn in their mother tongue. In Tigray, by contrast, almost all survey pupils learn in their mother tongue in both Grade 4 and Grade 5.

Table 2. Percentage of children learning in their mother tongue

	Grade 4	Grade 5	Total
Addis Ababa sites	86.3	82.7	84.7
Amhara sites	96.8	94.7	95.9
Oromia sites	88.8	88.8	88.8
SNNP sites	68.2	0.1	32.6
Tigray sites	99.9	99.8	99.8
Somali sites	76.7	61.6	69.6
Afar sites	47.0	47.2	47.1
Total	80.5	59.8	70.4

Figure 3. Attendance at Wave 1 (pupils recorded on register), by site



Pupil enrolment and attendance

The survey design enables an examination of changing patterns of enrolment and attendance over the course of a single school year, and thus an examination of whether those initially enrolled actually attend at Wave 1 and also still attend at Wave 2 towards the end of the school year.

Figure 3 shows the percentage of pupils enrolled on the register at the start of the school year who were present on the day of the Wave 1 survey. Overall, 87% of children enrolled were present at the time of Wave 1. To disaggregate by region: this figure ranges from 81% of children in the Amhara sites to 94% of children in the Addis Ababa sites. There is variation within regions in terms of pupil attendance, with particularly low rates of attendance evident in certain sites in the Somali and Afar regions, at below 50% in one Somali site, although this may also reflect the degree of accuracy of administrative records (school registers).

Among pupils who were present at the time of survey Wave 1, more than 90% continued to be enrolled in school at the time of survey Wave 2. However, only 84% of survey pupils continue to be present at Wave 2, as shown in Figure 4, ranging from 77% of pupils in the Amhara sites to 90% in the Tigray sites. Disaggregation by site reveals large variations, with particularly low attendance rates found in some sites in Afar and Somali, and in one site in Amhara and one in SNNP. Further analysis of these data is a priority.

Absenteeism data were also collected at the beginning and end of the school year, giving an indication of loss of teaching time due to pupil absence. Overall, pupils are absent for 4.6% of the time between 1 October 2012¹ and Wave 2 of the survey (which varied by location but fell between 7 and 22 May 2013²). This varied slightly by sex and region, being higher for boys than girls and ranging from 1.9% of days in the Addis Ababa sites to 9.6% in the Amhara sites. Significant site-level variation is evident, with pupils in one Afar site being absent for approximately 15% of the time. However, in general the rates of absenteeism are low.

1 21 January 2005 in the Ethiopian calendar.

2 29 August–14 September 2005, Ethiopian calendar.

School, class and teacher quality

A large number of indicators of school, class and teacher quality were collected as part of the survey. A selection of these indicators is presented in Table 3, focused on variation by region. There are clear differences in school resources, particularly between rural and urban areas. Only 17% of rural schools had electricity on the day of the survey, compared with 89% of urban schools. Only 34% of rural schools had water available, compared with 77% of urban schools. There is also regional variation, with availability of electricity being particularly low in Amhara and Oromia schools, and water being very scarce in Somali schools (available at only 15% of schools).

On average, class sizes are large, at 50 pupils per class across the entire sample, and slightly more in urban areas. Pupil–textbook ratios vary by subject, with 70% of pupils having their own maths textbooks, and 54% of pupils having their own literacy textbooks. There is regional variation, with Somali schools having particularly poor pupil–textbook ratios in both surveyed subjects. While 45% of Grade 4 classes are ‘self-contained’ (taught by the same teacher for both maths and literacy), almost no Grade 5 classes operate this system, as would be expected (in accordance with policy) following the shift to the second cycle of primary school. However, there is variation across Grade 4 classes, with Somali, Addis Ababa and Afar schools having either no or relatively few classes taught by the same teacher for both subjects, instead opting for subject-specialist teachers. By contrast, all Grade 4 classes in Tigray employ the self-contained model.

Teacher experience and qualifications also vary, with urban teachers being on average more experienced and being more likely to have completed a post-secondary or higher general education. Teachers in Afar are the least experienced (having on average seven years of experience, compared with the average of 12 years), but these teachers are the most likely to be educated beyond post-secondary level, a tendency perhaps linked to the changing rules governing teacher recruitment. Teachers in Tigray are the least likely to have received a post-secondary general education (only 51% of surveyed teachers), but they also have below-average years of experience (at 11 years).

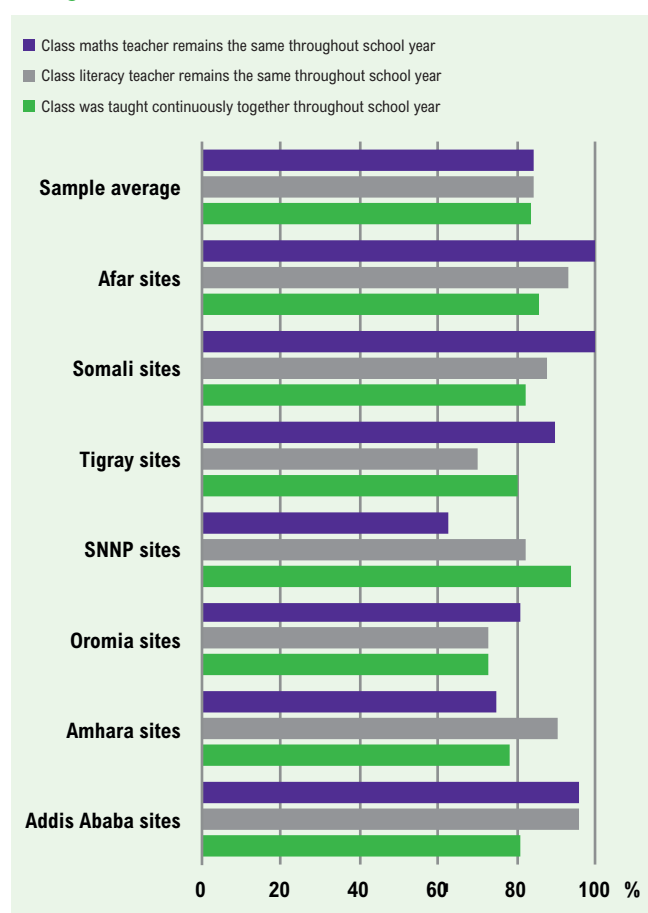
Figure 4. Attendance of survey pupils at Wave 2, by site



Table 3. Selected school, class and teacher characteristics by region and urban/ rural location

Region / location	School		Class				Teacher		
	Electricity in compound on day of survey, %	Water available from 'improved' source on day of survey, %	Mean class size (number of pupils)	All pupils in class have their own maths textbook, %	All pupils in class have their own literacy textbook, %	Grade 4 classes have same teacher for both maths and literacy	Grade 5 classes have same teacher for both maths and literacy	Mean years of teaching experience (years)	Teacher has completed post-secondary or higher general education, %
Addis Ababa sites	91.8	83.3	52.2	93.6	80.9	11.5	0.0	8.6	90.2
Amhara sites	23.1	46.2	47.4	100.0	62.5	57.9	0.0	10.6	64.7
Oromia sites	25.0	50.0	51.6	11.5	69.2	71.4	8.3	15.9	40.7
SNNP sites	75.0	75.0	48.1	80.6	40.3	56.3	0.0	14.5	56.3
Tigray sites	46.2	76.9	49.4	87.5	57.5	100.0	0.0	11.2	51.3
Somali sites	52.6	15.8	52.0	25.0	35.0	0.0	0.0	15.6	69.6
Afar sites	33.3	44.4	52.1	67.9	35.7	28.6	0.0	7.4	97.1
Urban	89.4	76.6	54.1	72.6	54.2	42.4	0.0	13.7	70.7
Rural	17.0	34.0	43.6	66.3	52.5	66.1	2.2	9.8	63.3
Total	53.2	55.3	50.3	70.4	53.6	44.5	0.8	12.2	67.9

Figure 5. Incidence of changes to class teaching arrangement and structure



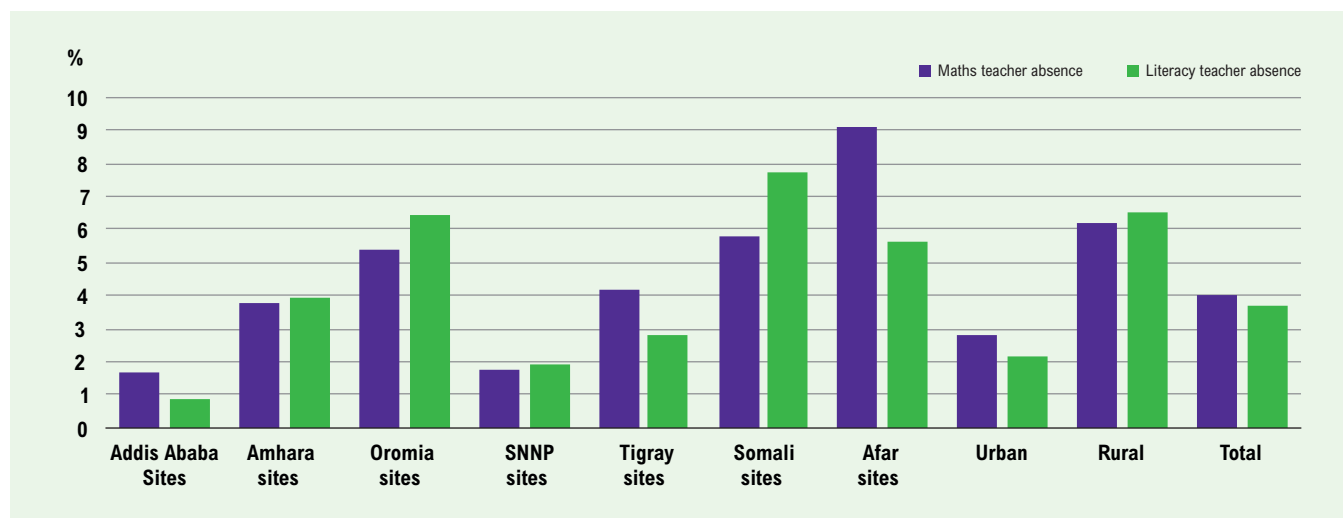
The longitudinal nature of the survey enables us to examine the way in which the arrangement and teaching of classes changed over the course of the school year. Instances of changes of teacher are perhaps surprisingly common, with 16% of classes experiencing a change of maths teacher and 15% of classes experiencing a change of literacy teacher. The incidence of teacher changes is higher in rural areas compared with urban areas. Further, 84% of classes were taught continuously together during the school year, with the remaining classes being split or separated during the school year. Teacher changes and class splitting suggest potential disruption to teaching and learning in affected classes. This is explored at the regional level in Figure 5.

Teacher absenteeism is, on the whole, low, at approximately 4% of days between 1 October 2012 and the Wave 2 survey visit in May 2013, for both subjects. However, significant variation is found between urban and rural areas, and between regions, with urban teachers having much lower levels of absenteeism than their rural counterparts, and with Somali and Afar having particularly high rates of absenteeism. Indeed, in Afar maths teachers were absent for nearly one-tenth of teaching time.

Conclusion

This initial review of the survey data has identified many encouraging findings, not least that pupils typically enrol in school at an appropriate age, and that there is a high degree of gender equity in enrolment. Furthermore, teacher absenteeism (and to some extent pupil absenteeism) is relatively low.

Figure 6. Teacher absence between 1 October and Wave 2 survey (per cent of days)



However, it is clear that important differences exist between regions, sites and urban/rural locations in terms of pupils' educational histories, enrolment and attendance, and school, teacher and class-level characteristics that help or hinder pupils' educational progress. The pastoralist regions of Somali and Afar emerge in many indicators as particularly disadvantaged, albeit often in different and contrasting ways. For example, age of enrolment is higher than average in many sites in Somali and Afar, but while drop-out and grade repetition are particularly prevalent in Afar (with just under a quarter of pupils reporting dropping out, and 2/5 of pupils reporting repeating a grade), these two phenomena are least common in the Somali region. However, on some indicators it is specific sites in regions such as Amhara and Oromia that emerge as areas for concern, for example in relation to the particularly low attendance of pupils at the end of the school year, as found in one site in Amhara. Incidences of teacher change and class splitting also suggest elements of flux and transition within the system. This highlights the

importance of considering equity of opportunity both between and within regions, and the differential experiences of children learning in different parts of the country over the course of the school year, which will be essential if policies are to be effectively tailored to fit Ethiopia's diverse contexts.

The aim of the school-based survey has been to create a database which tracks progress over the school year. Further research will focus on exploring these patterns of schooling and learning across a more comprehensive range of indicators of pupil disadvantage (for example, household economic status, children's health, children's work and so on) in order to improve understanding of issues relating to the quality of educational provision and the determinants of learning. The inclusion of non-government schools also offers the opportunity to conduct a more comprehensive comparison of government and non-government schools in selected survey sites, which will be of particular interest as the private sector expands.

REFERENCES AND FURTHER READING

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