



## Education and Learning:

### Preliminary Findings from the 2016 Young Lives Survey (Round 5): United Andhra Pradesh

This fact sheet presents findings from the fifth round of the Young Lives survey of children in United Andhra Pradesh<sup>1</sup> in 2016. Young Lives has followed two cohorts of children, born seven years apart in age. 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 the context of children's education over that 7-year time period. As the key findings show, great progress has been made on expanded access to secondary schooling, but learning levels often remain low. Policies to improve equity should continue to address the position of the poorest children, girls and those from marginalised social groups.

#### Key Findings

- 91% of 15-year-old children were enrolled in secondary schools in 2016, up from 78% for 15-year-olds in 2009.
- The increase in enrolment was particularly significant for girls and Backward Class children, with 90% of 15-years-old girls enrolled in 2016 (compared with 74% in 2009) and 91% of BC children (compared with 76% in 2009).
- The number of children attending private schools marginally increased from 35% in 2009 to 37% in 2016.
- Private school enrolment in 2016 remains biased towards boys (41%), Other Castes (62%), the top wealth tercile (62%), and urban children (64%).
- Average scores in a maths test were lowest in public schools (30%) compared with 41% in private schools.
- Comparison of answers to the same maths questions administered to 15-year-olds in 2009 and 2016 shows that while there was a marginal decline of 2 percentage points for 15-year-olds all schools in this period, the decline was more pronounced amongst children in private schools (6 percentage points).

<sup>1</sup> This factsheet refers to the original state of Andhra Pradesh, as it existed before its bifurcation into two new states of Andhra Pradesh and Telangana on 2 June 2014.

## The policy context for education in India

Since the Right to Free and Compulsory Education Act, 2009 (RTE Act) was introduced, the country has made huge strides towards achieving universal elementary education (Grades 1–8), with its gross enrolment ratio (GER) reaching 97% in 2015/16 (NUEPA 2016). This has resulted in a large number of children in India successfully completing elementary education and transitioning into secondary education (Grades 9–10). The centrally sponsored scheme for secondary education, Rashtriya Madhyamik Shiksha Abhiyan (RMSA) (MHRD 2009), commits to providing a secondary school within a reasonable distance of every habitation (village or urban area) and aims to improve the quality of education by ensuring that all secondary schools conform to prescribed or standard norms. This has resulted in a GER of 80% at secondary level in 2015/16 (76% in new Andhra Pradesh and 83% in Telangana).

## School enrolment, school type and grade completion

**Enrolment:** India has made huge strides in providing secondary-level education to children across the length and breadth of the country, with enrolment of 3.9 million children in Grades 9 and 10 in 2015/16 (NUEPA 2016). The Young Lives data reveal there has been an improvement in enrolment levels, with 91% of the Younger Cohort children attending school at the age of 15 in 2016, compared to 78% of the Older Cohort at the same age in 2009. The greatest increase is among girls (16 percentage points), poor children (18 percentage points) households, Backward Class (15 percentage points) and Scheduled Caste (14 percentage points) children, and those with mothers with no formal education (17 percentage points).

The enrolment rate of the Younger Cohort at the age of 12 was of 97% and later falls to 91% when they reach the age of 15. The groups that show the greatest declines in enrolment between the ages of 12 and 15 are: the poorest households (11 percentage points), Schedule Tribe children (9 percentage points), children whose mothers had no schooling (9 percentage points), girls (7 percentage points), and those living in rural areas (7 percentage points).

**Private schooling and extra tuition:** Our analysis shows how private secondary school enrolment is marginally increasing (from 35% for 15-year-olds in 2009 to 37% for 15-year-olds in 2016). Private school enrolment is clearly biased towards boys, socially advantaged groups, better-off households, and urban children, but it actually decreased for children from Scheduled Tribe backgrounds. Private school enrolment for the Younger Cohort children has also increased between the ages of 12 and 15 (from 33% to 37% respectively).

Disparities also exist in after-school extra tuition across social groups and rural-urban location and by gender. It is

important to note that the number of 15-year-olds receiving extra tuition decreased from 9% to 7% between 2009 (Older Cohort) and 2016 (Younger Cohort).

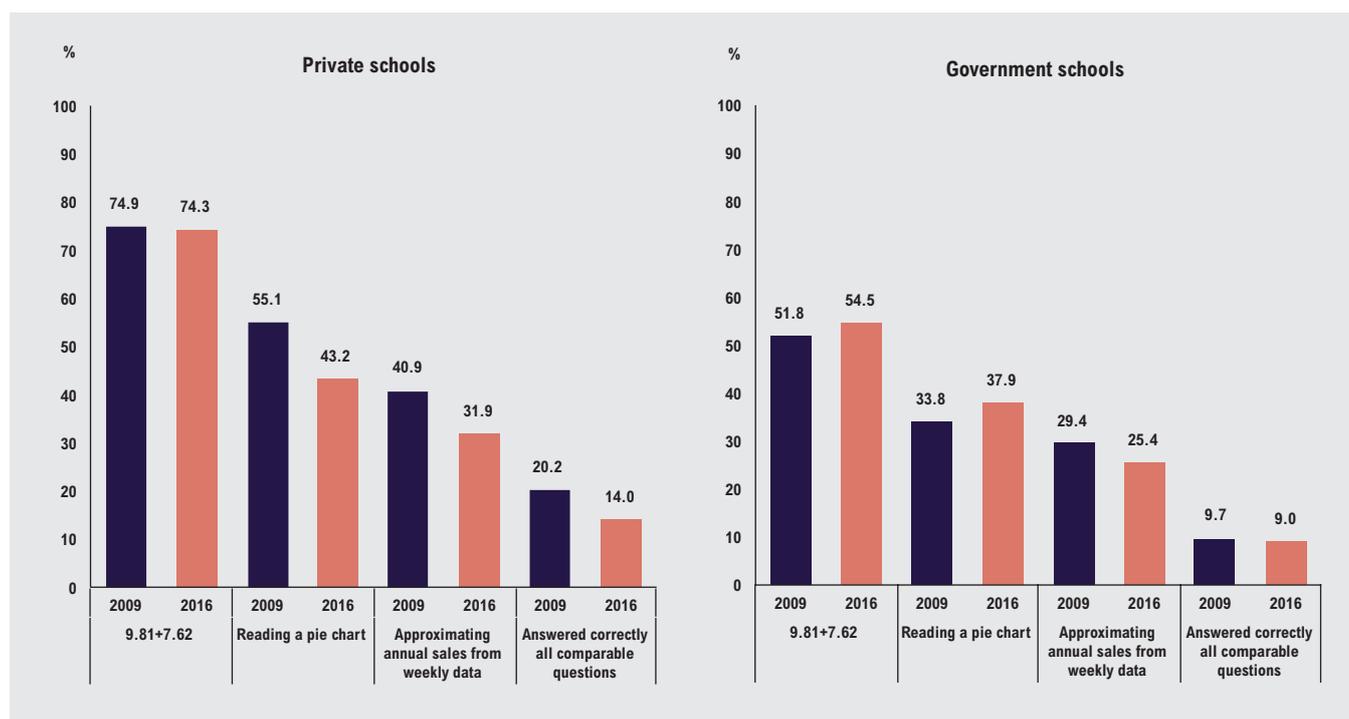
**Grade progression:** Young Lives' education history data enable us to analyse how children are progressing through school and to investigate how many children are over-age for grade (following grade repetition or late enrolment). 15-year-old children should normally be in Grade 9 if they started primary school at age 6 (Grade 1). 7% of the Older Cohort children were found to be in a lower grade for their age at 15 in 2009, this has increased slightly to 10% for the Younger Cohort in 2016 (see Table 1). Our survey showed that the over-age children are more likely in government schools (11%) rather than private secondary schools (10%). The fact that 13% of boys were over-age compared with 7% of girls, and a very large proportion of Scheduled Tribe children were over-age (22%), is an important finding requiring further attention, given that there is a 'no detention policy' or automatic progression to the next grade in all elementary schools.

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

	Older Cohort (age 15 in 2009)	Younger Cohort (age 15 in 2016)
<b>Average</b>	7.2	10.2
<b>Gender</b>		
Boys	7.8	13.0
Girls	6.6	7.0
<b>Caste</b>		
Scheduled Castes	12.1	8.9
Scheduled Tribes	12.8	21.7
Backward Classes	5.6	8.3
Other Castes	3.1	8.2
<b>Type of school</b>		
Private	5.3	9.5
Public	8.4	11.2

## Learning outcomes

Young Lives gathers information about children's learning achievement through vocabulary and maths tests conducted in each survey round. When we look in detail at how different groups of 15-year-olds are doing in terms of these tests, we see little difference between boys and girls, but large differences between Scheduled Caste and Scheduled Tribe and Other Caste children. Children from wealthier households, those enrolled in private schools, and urban children are doing slightly better than other children in these tests. Maternal education is also strongly associated with children's test scores: there is a gap of 19 percentage points in maths test scores using a fuller test (of 31 questions where data is only available for the Younger Cohort) and 7 percentage points in vocabulary test scores between children whose mothers had no education compared to those whose mothers had more than 10 years of education (see Table 2).

**Figure 1. Percentage of children correctly answering maths questions**

A second, shorter, set of maths questions is available which was asked of the Older and Younger Cohorts at 15 years.<sup>2</sup> Comparing how children answered the same maths questions in 2009 and 2016, reveals that learning levels have been persistently low. Overall, only one in 10 children correctly answered all three maths questions in 2016. Children from rural areas, the poorest households, Scheduled Castes and Scheduled Tribes, girls, and those whose mothers had no formal education fared worse than their peers (Table 2). While children in private schools tended to score better in the maths questions (see Figure 1), there was a decline in performance over the period (6 percentage points) than those in government schools (less than 1 percentage point).

## Conclusions: from access to learning

There has been considerable progress made in addressing access inequalities in secondary school enrolment in the past few years, especially bridging the gender gap. While 91% of the Younger Cohort children were enrolled in school at age 15 in 2016, only 78% of the Older Cohort children were enrolled in school at the same age in 2009. Inequalities related to segregation of the poorest children

into government schools continue with 82% from the poorest households enrolled in government schools compared with only 28% from the least poor households (Table 2). The low levels of achievements in mathematics across both private and government schools are a real cause of concern, with Scheduled Caste and Scheduled Tribe children faring the worst. This finds resonance in the National Achievement Survey (NCERT 2015) of students in Grade 10, which found that children from Scheduled Castes scored significantly lower than other students.

We need to dedicate concerted efforts to ensure that the focus moves from education 'access' to 'learning outcomes' at all levels. To make sure that equity is clearly linked with quality, we must target efforts on girls as well as other marginalised children, particularly in rural areas and from disadvantaged social groups and the poorest households. This may require focusing on both pre-service and in-service training of teachers at all levels, as well as mentoring and monitoring of secondary schools to ensure that children are provided equitable, quality learning opportunities. Given the long-term effects of pre-school education on cognitive achievement (Singh and Mukherjee 2017), we also need to make adequate investments in laying a strong foundation through providing quality pre-school education.

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

**Table 2: Schooling and learning outcomes of 15-year-old children in united Andhra Pradesh**

	Children enrolled in school (%)		Children attending private schools (%)		Children receiving extra tuition (%)		Children answering three comparable maths questions correctly (%)		Average score in maths test of 31 questions (%)	Average score in vocabulary test (%)	Number of children <sup>3</sup>	
	2009	2016	2009	2016	2009	2016	2009	2016	2016	2016	2009	2016
<b>Gender</b>												
Male	82.7	92.5	39.3	41.1	10.7	8.9	16.8	11.3	34.2	84.4	417	978
Female	73.8	89.5	30.8	31.3	7.7	5.3	7.1	8.6	31.3	83.1	439	841
<b>Caste</b>												
Scheduled Castes	77.2	91.1	16.1	18.3	5.1	2.0	7.3	6.8	28.6	83.6	179	337
Scheduled Tribes	75.7	86.7	20.5	15.5	1.9	4.6	7.2	6.9	29.1	80.8	97	274
Backward Classes	75.8	90.6	34.5	38.6	10.9	8.8	11.0	10.0	32.7	83.3	399	832
Other Castes	85.5	95.5	61.6	61.6	13.4	10.2	20.4	15.2	39.8	87.3	181	376
<b>Maternal education level</b>												
None	69.9	86.5	23.9	22.0	5.4	5.3	9.9	6.1	27.6	81.3	495	912
1 to 5 years	88.3	90.6	28.7	33.6	12.4	6.0	13.5	9.9	33.5	84.6	156	325
6 to 10 years	92.4	98.5	59.3	53.3	17.2	10.3	14.7	14.3	38.3	87.0	156	462
More than 10 years	100.0	100.0	82.4	78.1	17.7	17.2	17.7	15.6	47.0	88.2	17	64
<b>Household wealth level (YL wealth index)</b>												
Poorest tercile	68.0	86.1	13.8	15.8	4.6	4.1	6.2	6.0	27.5	80.3	273	598
Middle tercile	77.9	92.4	25.0	30.0	8.9	5.7	12.8	10.3	32.5	84.1	289	605
Least poor tercile	88.4	94.9	60.5	61.5	14.0	12.0	16.0	13.8	38.5	87.2	294	611
<b>Location</b>												
Urban	86.8	95.3	65.2	64.2	17.5	14.6	14.2	13.3	37.3	86.1	205	445
Rural	75.4	89.8	24.6	27.2	6.6	4.9	11.1	9.0	31.4	82.8	651	1374
<b>States – After bifurcation in 2014</b>												
New Andhra Pradesh	79.4	90.7	36.2	34.7	11.1	8.1	11.9	11.6	35.3	84.6	563	1182
Telangana	75.8	91.9	33.2	40.2	5.6	5.6	11.6	7.1	28.3	82.4	293	637
<b>Type of school attended</b>												
Public	64.1	57.8	-	-	10.3	5.5	9.7	9.0	30.0	83.2	452	952
Private	35.2	36.6	-	-	12.9	11.2	20.2	14.0	40.7	87.4	247	606
Other	0.7	1.1	-	-	0.0	11.1	20.0	16.7	33.8	89.4	5	18
Mixed public private	-	4.5	-	-	-	17.3	-	9.3	37.9	81.1	-	75
<b>Average of full sample</b>	<b>78.1</b>	<b>91.1</b>	<b>35.2</b>	<b>36.6</b>	<b>9.2</b>	<b>7.2</b>	<b>11.8</b>	<b>10.0</b>	<b>32.9</b>	<b>83.8</b>		
<b>Number of children</b>	<b>904</b>	<b>1823</b>	<b>705</b>	<b>1656</b>	<b>906</b>	<b>1882</b>	<b>856</b>	<b>1819</b>	<b>1819</b>	<b>1690</b>	<b>856</b>	<b>1819</b>

<sup>3</sup> The figures may not necessarily add up to the total number of children due to missing data.

## REFERENCES AND FURTHER READING

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## ACKNOWLEDGEMENTS AND CREDITS

This factsheet gives a preliminary overview of some of the key data emerging from the fifth round of the Young Lives household and child survey. We have produced separate factsheets for the new states of Andhra Pradesh and Telangana, as well as this factsheet reporting on our original sample in the undivided state (as it was at the time of our survey). This factsheet was written by Renu Singh, P. Prudhvikar Reddy, Professor S. Galab and Protap Mukherjee. We would like to thank Prudhvikar Reddy who coordinated the survey fieldwork, our fieldwork teams (particularly the fieldwork supervisors) for their efforts in minimising attrition, K.T. Shyamsunder our Data Manager, and Grace Chang, 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.

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



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