



Save the Children®

Literacy Boost

Kapilvastu, Nepal

Baseline Report

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Executive summary

Save the Children (SC) began sponsorship-funded programming in the western Kapilvastu district of Nepal in 2010 where children and families had a high level of need and low performance in most child-focused development indicators of education and health status. In partnership with the local NGO Sunshine Social Development Organization (SSDO), SC works in 15 schools serving a predominantly Awadhi-speaking population on basic education interventions that support SMC capacity building and teacher training on active learning and continuous assessment. From these interventions, the five Literacy Boost schools have active child clubs, relatively strong support from the school management, and engaged community members, but a situation analysis found that none of the children in 11 schools visited could read or write a word correctly in either Nepali or Awadhi, leading to this baseline assessment in five sponsorship and five comparison schools were identified from non-sponsorship sites which shared key characteristics such as size.

Ten boys and 10 girls were randomly sampled from each school. Their backgrounds are similar with three significant exceptions: the children Literacy Boost schools are younger than their comparison school peers; all comparison school students speak Avadhi at home, while Literacy Boost schools have 2 Tharu speakers and 11 children who speak Nepali at home; and 91 percent of girls have chores as compared to 80 percent of boys. This could present a potential barrier to participation in reading opportunities that the team should watch for when structuring reading buddy and reading camp activities.

At the school level, there are also three significant differences: in Literacy Boost schools class sizes are higher, repetition is lower, and students walk a significantly further to school. These could be the effects of prior programming, making this investigation of skills an important next step in addressing quality.

Children in these groups do not differ on concepts about print (CAPs) or letters, but overall know very few and in some schools more children struggle than in others. Children who report that they have books at home have significantly higher concepts about print total scores on average than those who do not, but even so, the vast majority of second graders are struggling with print, making the parts of a book and the components of text – letters and words – a very good place to begin work with both teachers and parents. Children from households with books and older siblings have higher scores and can be a resource to younger children and those without books at home.

Very few grade two students – can read words out loud – whether reading single Nepali words in a list or text in a passage in either Nepali or Avadhi. The few (11) Nepali speakers in the sample have significantly more letter knowledge and some can read words, but they too struggle just as their Avadhi-speaking peers to read sentences and passages. Significantly fewer Literacy Boost school students (70%) score zero when reading common Nepali words from the curriculum than comparison school students (84%), but the vast majority are non-readers so the program has much to offer!

All math foundational skills but basic counting are a challenge for second graders in Kapilvastu. These findings support the team's move toward interventions to directly support learning and from the data we have generated a set of benchmarks against which to mark progress in creating positive lasting chance for the children of Kapilvastu.

Introduction

Save the Children (SC) began sponsorship-funded programming in the Kapilvastu district, located in the Western Region of Nepal, in 2010. The district was chosen due to the high level of need and low performance in most child-focused development indicators in the areas of education and health. In partnership with the local NGO Sunshine Social Development Organization (SSDO), SC is currently working in 15 schools across 4 village development committees (VDCs). The population in these VDCs is predominantly from the Awadhi language group. To date, basic education interventions in Kapilvastu have focused on supporting SMC capacity building and teacher training on active learning and continuous assessment.

In 2010, with technical assistance from SC/US education specialists from the Department of Education & Child Development (DECD), the Nepal country program embarked on a language and learning situation assessment in the 11 schools where sponsorship programming was operational at the time. Findings from the situation assessment confirmed that children were having a difficult time learning in Nepali—the language of instruction and the language in which textbooks, tests and other classroom materials were written. Children did not understand any Nepali when they first entered school in grade 1, and said they just listened and tried their best to understand. Teachers unanimously said that it was only when children were in grade 4 or 5 that children could grasp enough Nepali to understand lessons or texts; most teachers ended up translating or elaborating on key concepts in Nepali in the Awadhi language. Parents and SMC members for the most part agreed that using Awadhi as the language of instruction in school would help children understand lessons better, but expressed concern that their children should also be able to learn Nepali, the national language. Both teachers and parents also shared that speaking and listening to Awadhi was easy, but that reading and writing the language was hard because most of them were trained to read and write in Nepali and not their mother tongue. The syntax and structure of written Awadhi is also more formal than oral Awadhi.

SC staff members did informal checks on whether children are able to read and write—be it in Nepali or in Awadhi. In one school, all grade 2 children who were asked to read a few lines in their Nepali textbooks were unable to do so. During the language and learning situation analysis process, none of the children in the 11 schools who were asked to write a word in Awadhi could do so correctly. Having tested Literacy Boost in its old sponsorship site in Kailali, the country program determined that this approach would be an important intervention to launch in its Kapilvastu site, contextualized to the district's particular language and literacy situation. A Literacy Boost baseline assessment was thus launched in the target schools and in an equal number of comparison schools.

Methodology

The five schools for the intervention were selected in consultation with the Kapilvastu District Education Officer from the 15 schools where sponsorship programs were ongoing after setting aside those five that would be doing a mother tongue instruction pilot. The five Literacy Boost schools were chosen based on factors such as having active child clubs, relatively strong support from the school management, and more engaged community members. These five Literacy Boost schools represented both primary schools and schools with upper grades (lower secondary schools). A set of five comparison schools were identified from non-sponsorship sites which shared these characteristics (i.e., a mix of primary and lower secondary schools). The grade 2 children assessed from each of the schools were selected randomly, aiming for 10 boys and 10 girls. Where there are fewer than 10 boys and 10 girls, this is because there were not additional children in the class. Using this sampling method, the following sample was formulated.

Table 1. Schools and children by group

Literacy Boost	Girls	Boys	Total	Comparison	Girls	Boys	Total
School 1	12	8	20	School 1	9	11	20
School 2	9	11	20	School 2	10	9	19
School 3	11	10	21	School 3	10	10	20
School 4	4	9	13	School 4	10	9	19
School 5	13	7	20	School 5	10	10	20
Total	49	45	94	Total	49	49	98

There are 192 children in the sample: 94 Literacy Boost and 98 Comparison school students. The comparison sample has 49 girls and 49 boys; the Literacy Boost sample has 49 girls and 45 boys.

Comparability of school types on contextual factors

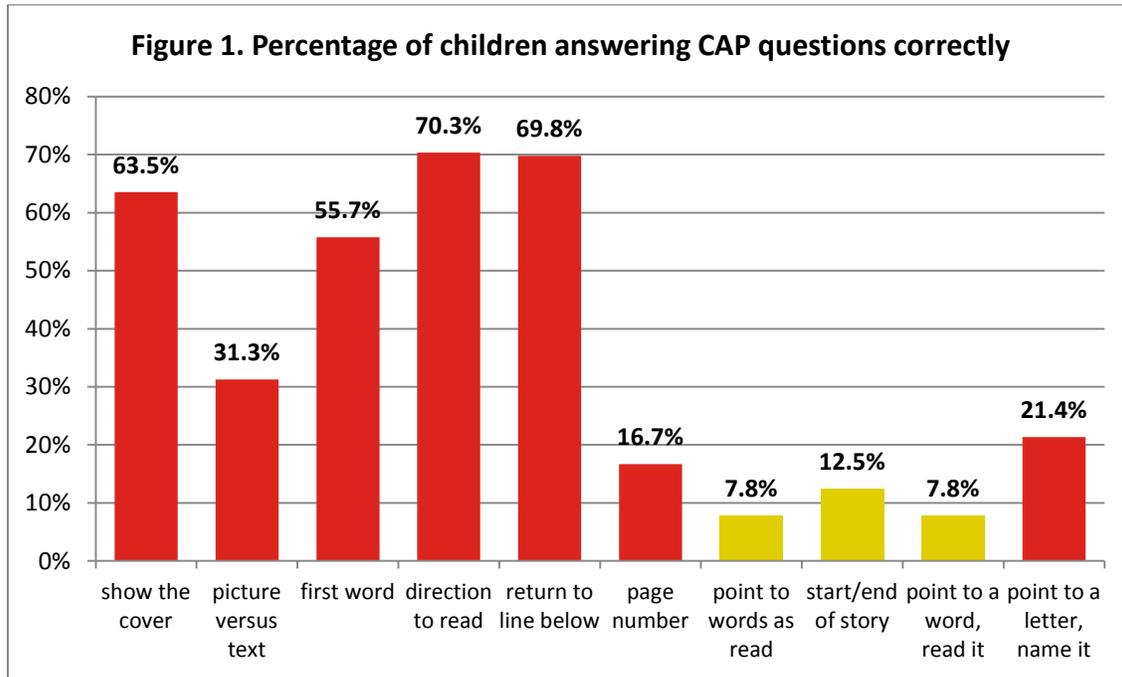
Children in Literacy Boost schools are 7.5 years old, significantly younger than their 8 year-old counterparts in the comparison schools. All comparison school students speak Awadhi at home, while Literacy Boost schools have 2 Tharu speakers and 11 children who report speaking Nepali at home. During analysis of skills this difference will be investigated for its impact on comparisons.

About a third of children have a radio at home, two thirds have electricity, half have books, and a quarter have a tv. Forty two percent of the students live in homes with straw roofs (the rest have tile, brick or cement), 15 percent have mud walls, and 88 percent have mud floors. Only 10 percent have a toilet, but 94 percent own land. They live with 7 or 8 family members on average, work an average on an hour a day at home (only two of 192 work for wages). **These averages do not differ between school groups, but 91 percent of girls work as compared to 80 percent of boys, a significant difference.**

Class sizes range from 23 to 83 and are significantly higher in Literacy Boost schools (65 students on average) than in comparison schools (50 students). Students report high levels of repetition: 100 percent in comparison schools repeated first grade as did 90 percent in Literacy Boost schools; 36 percent in comparison schools repeated second grade as did 20 percent in Literacy Boost schools. Both of these differences are significant. Further, Literacy Boost students walk a significantly further time on average (29 minutes) than do comparison schools students (19 minutes). **Thus, it appears that while the children in these two groups have similar backgrounds, the Literacy Boost schools are significantly further away from children's homes and more crowded, but somehow have significantly lower grade 1 and grade 2 repetition rates.** This could be the impact of prior programs on quality – but without baseline repetition it is not possible to know. Our interest here is learning, so we turn now to a consideration of the reading and math skills of these children by group.

Concepts about Print (CAP)

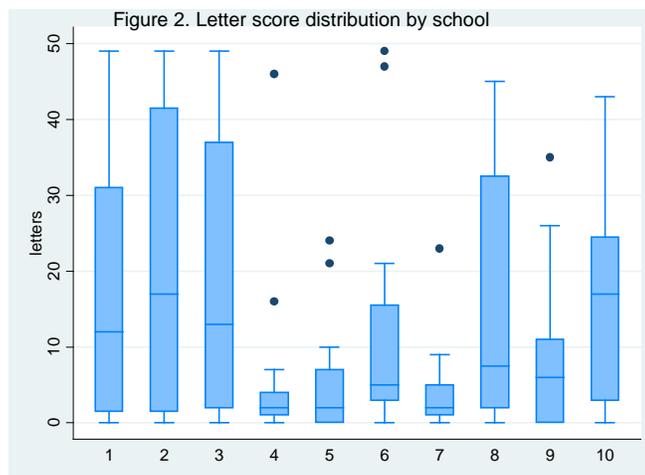
All but 13 percent of children demonstrate mastery of some concepts about print. On average, the children know 3 or 4 concepts and this is similar in the two groups. It is also equal between girls and boys. **Children who report that they have books at home have significantly higher concepts about print total scores on average than those who do not, as do Nepali speakers.** Figure 1 below shows that most difficult concepts about print (in yellow) are pointing to words as their read as well as singling out words/letters and reading/naming them.



These second graders are not familiar with print, struggling to correctly identify books parts, and while they have picked up which direction to read, the parts of a book and the components of text – letters and words – seem a very good place to begin work with both teachers and parents.

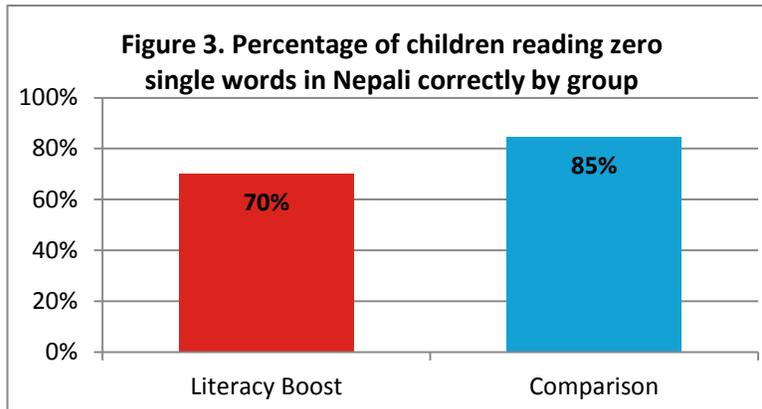
Letters

All but 17.7 percent of children correctly identify at least 1 letter of the alphabet, and on average comparison students identify 11 and Literacy Boost students identify 14, a non-significant difference. Interestingly, the 11 Nepali speakers know 28 letters on average. As can be seen in the figure to the right, there are schools in which some children know all letters (1, 2 and 3), and in others (4 and 7) most sampled children are struggling to learn their letters. There are no significant differences between boys' and girls' letter scores.



Reading Nepali words and text

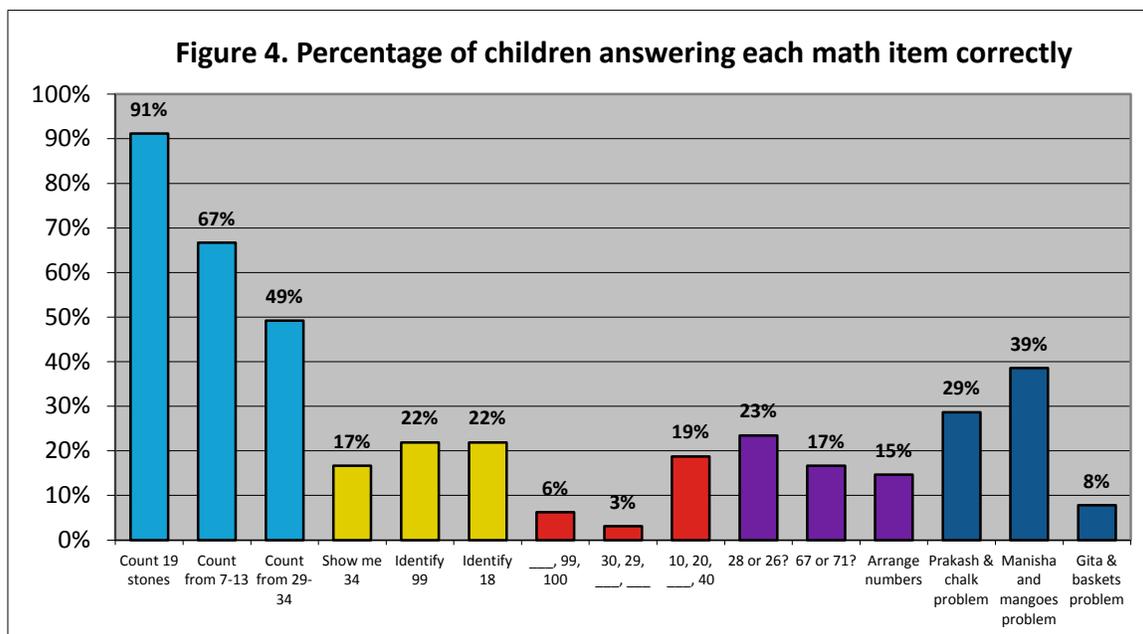
Most children (77.6%) cannot read a single word correctly in the common list of Nepali words from the second grade text or in the Nepali passages (91%) correctly. Nor could the majority read any words correctly in the Awadhi text (97%). One 45 percent of Nepali speakers read no words. Setting these children aside, in Figure 3 the difference between zero scores in Literacy Boost and comparison groups is still significant. **At the start of this intervention, there is already a difference in the skills levels of the children in these schools: significantly fewer Literacy Boost schools students are unable to read any common words at all.** However, the vast majority remain non-readers so the program has much to offer! Without independent reading, there is no measure for reading comprehension yet among these readers.



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Math

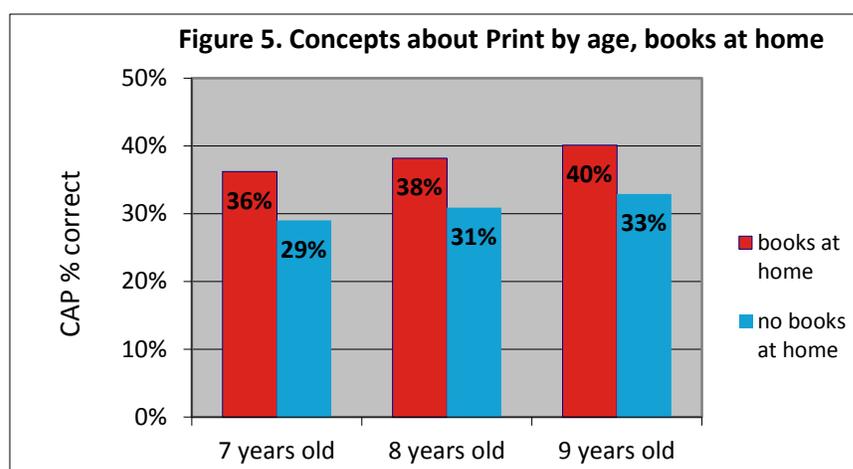
On average, children answered 4 of 15 math items correctly (26.67%), with no difference between Literacy Boost and comparison students in math performance and no difference between girls and boys. Nepali-speakers answer 6 items correctly, significantly more than their peers, demonstrating the linkages between language of instruction and learning in math.



As can be seen in the figure, missing numbers (in red), number recognition (in yellow and purple) and the third word problem are the items that posed the greatest challenges for these students. **Thus, with the exception of counting, all of these foundation skills pose challenges for the second graders in Kapilvastu.**

Relationships between background, household literacy and reading skills

Fitting a regression model that accounts for clustering by school, there is a clear and significant relationship between age, having books at home and CAP score as seen in the figure below.



Children from households with books demonstrate significantly higher CAP mastery than those without books at home, as do older children. Even so, overall familiarity with books is low and offers much room for improvement.

A note about benchmarks

While Save the Children has used this approach to reading assessment and intervention in Malawi, Pakistan, Ethiopia, Mali and Mozambique, comparison across countries and languages is less helpful than more detailed contextual information for setting expectations of impact. For each measure used in these assessments, the upper end of the range of scores can be used to consider what is currently possible among these children. **In Table 2 below, we present the score at the 75th percentile of each measure at baseline and suggest it as a benchmark for our next assessment against which to check our progress in supporting more children to gain these essential skills.**

Table 2. Average Baseline Scores on Literacy Outcome Measures by School Type

Literacy Outcome	Description	Literacy Boost Schools	Comparison Schools	75 th percentile
Concepts about Print	number concepts demonstrated correctly of 10	3.85	3.28	5
Letter knowledge	Number of letters/sounds identified of 49	14.20	11.13	21
Nepali Single Word Reading	Number of words read correctly of 20	1.29 ^b	.68	10 ^a
Nepali Reading Fluency	Number of words in sentences read correctly in a minute	.51 ^b	.10	12 ^a
Avadhi Reading Fluency	Number of words in a connected text read correctly in a minute	.47	0	3 ^a
Math	number of math items answered correctly of 15	4.48	4.03	6

^a The 95th percentile is used due to the extreme number of 0 scores in the sample for this skill.

^b These averages are slightly higher and significantly different from the control group if the 11 Nepali speakers are included in the ttest. They were set aside for these comparisons.

Conclusion

This reading skills study shows that:

- While the children in the groups have similar backgrounds, the Literacy Boost schools are significantly further away from children's homes and more crowded, but have significantly lower grade 1 and grade 2 repetition rates.
- Significantly more girls (91%) work as compared to boys (80%), a potential barrier to participation in reading opportunities that the team should watch for when structuring reading buddy and reading camp activities.
- Children who report that they have books at home have significantly higher concepts about print total scores on average than those who do not, but even so, the vast majority of second graders are struggling with print, making the parts of a book and the components of text – letters and words – a very good place to begin work with both teachers and parents.
- Children in these groups do not differ on CAPs or letters, but overall know very few and in some schools more children struggle than in others.
- There is very little reading skill apparent among grade two students – whether reading single words in Nepali or text in either Nepali or Avadhi. The few (11) Nepali speakers in the sample have significantly more letter knowledge and some can read words, but they too struggle just as their Avadhi-speaking peers to read sentences and passages.
- Significantly fewer Literacy Boost school students (70%) are unable to read any common words at all than comparison school students (84%), but the vast majority are non-readers so the program has much to offer!
- All math foundational skills but basic counting are a challenge for second graders in Kapilvastu.
- Children from households with books demonstrate more CAP mastery than those without as do older children. These children and older siblings can be a resource to younger children and those without books at home.

These findings support the team's move toward interventions to directly support learning and from the data we have generated a set of benchmarks against which to mark progress in creating positive lasting chance for the children of Kapilvastu.