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MINISTRY OF EDUCATION SCIENCE, TECHNOLOGY AND SPORTS

## USAID/Uganda School Health and Reading Program:

### Cluster 2 Follow-Up 2 End of P2: Leb Acöli, Lugbarati, Lumasaaba, Runyoro-Rutooro

Has reading achievement increased as a result of the USAID/Uganda School Health and Reading Program? Is classroom teacher behavior improving based on program interventions? Early Grade Reading Assessment (EGRA) data collected for Cluster 2 shows that Leb Acöli, Lugbarati, and Runyoro-Rutooro schools receiving the SHRP intervention are continuing to make small but significant progress towards reading proficiency.

The Early Grades Reading Assessment (EGRA) data presented here are from a randomized control trial that assessed 3,119 P2 learners (1,582 program and 1,537 control) from 112 randomly selected government primary schools in 10 program districts in Uganda<sup>1</sup> in October, 2015. These findings at the end of P2 were compared to baseline data collected from 3,893 program and 3,577 control learners at the beginning of P1 in February, 2014. In addition, 33 P2 reading lessons were observed and 89 P2 teachers and 116 head teachers were interviewed.

#### Synopsis of Findings:

- All 4 Cluster 2 languages started out with very low levels of reading readiness at the beginning of P1. At the end of P2, Leb Acöli and Runyoro-Rutooro schools receiving program interventions are performing significantly better than control schools in local language reading fluency, local language reading comprehension and in English reading fluency, with a medium to large effect size. This year, Lugbarati has also started making progress.
- Teachers in program classrooms are teaching more from lesson plans that employ early grades reading methodology. Learners in program classrooms are more likely to read from printed material.
- While teachers are receiving some classroom support from head teachers, follow up support by CCTs is insufficient
- In general, there were no differences in reading scores for boys and girls, but they are noted in the report when they do occur.



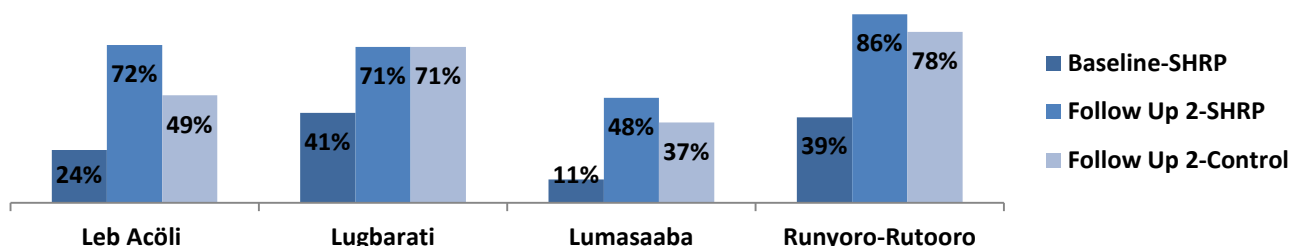
#### Beginning Reader: Local Language Letter Sounds and Segmenting

The EGRA subtasks assessing letter sounds and segmenting measure learners' ability to associate a letter with the correct sound and to break a word into its composite sounds or syllables. These skills lay the foundation for developing reading proficiency. **Figure 1** shows an increase in the percent of learners who could correctly identify at least one local language letter sound from 11% to 41% in the beginning of P1 to 48% to 86% at the end of P2. In Leb Acöli and Runyoro-Rutooro, significantly more learners in program schools (72% and 86%, respectively) could read

<sup>1</sup> Districts include: Gulu, Kitgum and Pader for Leb Acöli; Arua for Lugbarati; Mbale, Sironki, and Manafwa for Lumasaaba; and Kyenjojo, Masindi and Kabarole for Runyoro-Rutooro.

one letter sound than learners in control schools (49% and 78%).<sup>2</sup> In Lumasaaba, 48% of program learners could read at least one letter sound compared to 37% of control learners. In Lugbarati, there was no difference between program and control learners at follow up<sup>3</sup>.

**Figure 1: Percent of Learners who could identify at least one Local Language Letter sound**

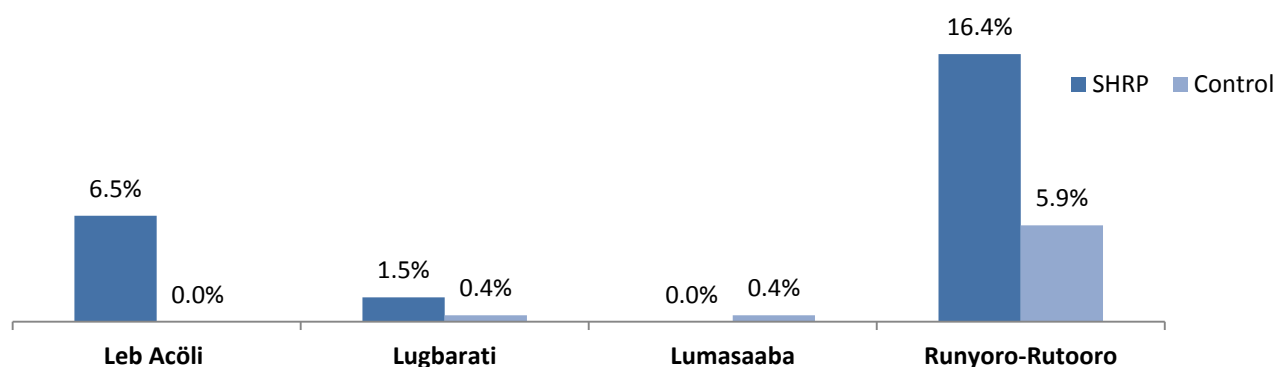


The segmenting subtask asks learners to separate words into syllables. For all four C2 languages, learners in treatment schools could correctly segment more words than in control schools. In Leb Acöli, Lumasaaba, and Lugbarati, there was almost no difference from the beginning of P1 (baseline) and the end of P2 (follow up 2) in control learners' ability to segment words. For schools receiving program interventions, the change is significant: in Leb Acöli, learners in program schools could correctly segment 6.7 syllables compared to 5.3 syllables in control schools. In Lugbarati and Lumasaaba, learners in program schools correctly segmented 5.6 and 5.7 (respectively) syllables correctly, compared to 4.7 and 5.0 correctly segmented syllables in control schools. In Runyoro-Rutooro, learners could correctly segment 7.2 local language words, compared to 6.8 in control schools.<sup>4</sup>

#### Local Language Oral Reading Fluency and Comprehension

At the end of P2 (**Figure 2**), 6.5% of Leb Acöli learners in program schools could read 20 or more local language words per minute, compared to 0 in control schools. In Runyoro-Rutooro, 16.4% of P2 learners could read upwards of 20wpm at second follow up, compared to 5.9% in control schools. In Lugbarati, the percent of learners reading 20+ wpm was higher for treatment (1.5%) than control (0.4%), although both results are very low. In Lumasaaba, virtually no learners in program or control schools read more than 20 wpm<sup>5</sup>.

**Figure 2: Percent Learners Reading 20+ WPM (Local Language)**



<sup>2</sup> Differences were statistically significant for Leb Acöli and Runyoro-Rutooro (p<0.1).

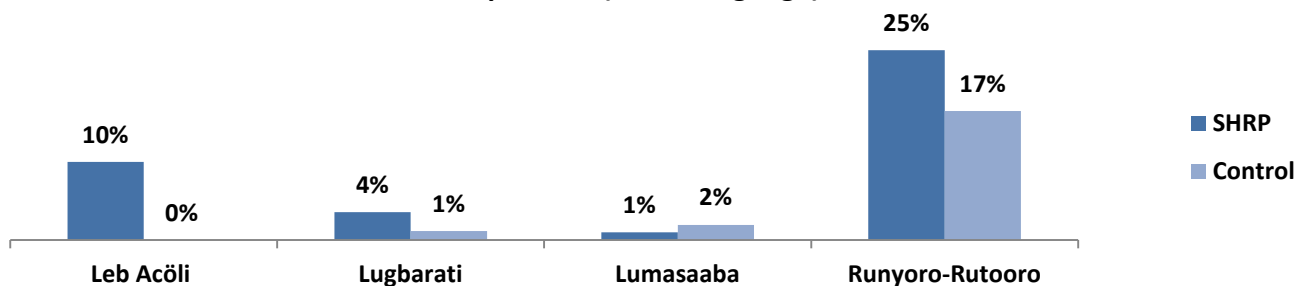
<sup>3</sup> For this subtask, boys in Lugbarati control schools performed significantly better than girls and girls in Runyoro-Rutooro SHRP schools significantly outperformed boys.

<sup>4</sup> Differences in segmenting scores between control and treatment were statistically significant for all language groups except Runyoro-Rutooro. Effect size was moderate for Leb Acöli and Lumasaaba.

<sup>5</sup> Differences in learners reading 20+ local language words per minute were significant in Leb Acöli and Runyoro-Rutooro.

Literacy achievement cannot be measured simply by the ability to read words with fluency- learners must also show they understand what they have read. At baseline, Cluster 2 languages again began at zero- no P1 learner could correctly answer a comprehension question based on a short story they were asked to read. By the end of P2, learners in program schools were able to answer more reading comprehension questions than at baseline and significantly more than learners in control schools.<sup>6</sup> **Figure 3** shows that more P2 learners from program schools could correctly answer at least one local language reading comprehension question than P2 learners from control schools in Leb Acöli (0%, 10%), Lugbarati (1%, 4%) and Runyoro-Rutooro (17%, 25%)<sup>7</sup>.

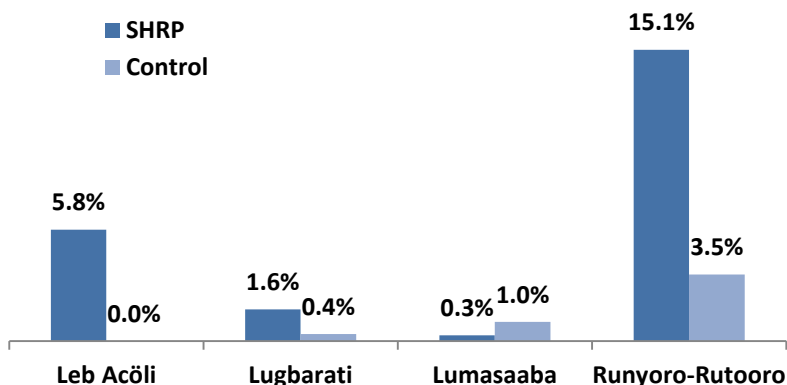
**Figure 3: Percent Learners who correctly answered one Reading Comprehension question (Local Language)**



### English Oral Reading Fluency and Comprehension

When learners are first taught to read in a language familiar to them, they are more likely to understand and acquire foundational reading skills that can then be transferred to other languages. For this reason, SHRP teachers in P1-P3 are trained in local language literacy instruction in P1-P3 with English taught as a separate subject. Results on the English Oral Reading Fluency and English Reading Comprehension subtasks (**Figure 4**) show that with the exception

**Figure 4: Percent Learners Reading 20+ WPM (English)**



of Lumasaaba, similar to the results for Local Language, P2 learners receiving the program intervention can read more words per minute in English: In Leb Acöli, 5.8% of learners in program schools read over 20 English words per minute compared to zero in control schools. In Runyoro-Rutooro, the difference was even greater, with 15.1% of program and just 3.5% of control learners reading over 20 English wpm. In Lugbarati, almost no learners in control schools read over 20 English wpm, compared to 1.6% of learners in program schools. In Lumasaaba, 1% of control learners read over 20 English wpm, compared to just 0.3% of program learners.<sup>8</sup>

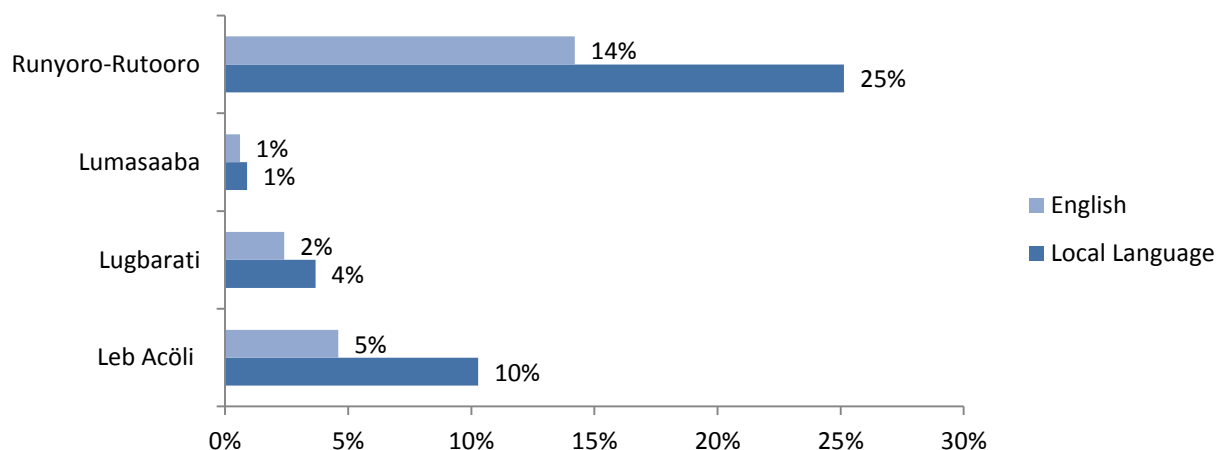
P2 learners in program schools also understand more of what they are reading in English than learners in control schools: three to five times as many program learners than control learners answered at least one English reading comprehension question correctly in Leb Acöli, Lugbarati and Runyoro-Rutooro. As results from Cluster 1 languages also show, learners comprehend more of what they read in local language than in English (**Figure 5**).

<sup>6</sup> With the exception of Lumasaaba, all differences in mean reading comprehension questions answered correctly (local language) were statistically significant, with a large effect size for Leb Acöli.

<sup>7</sup> For this subtask, boys in Lugbarati control schools performed significantly better than girls and girls in Runyoro-Rutooro SHRP schools significantly outperformed boys.

<sup>8</sup> Differences between SHRP and control schools in learners reading 20+ wpm were statistically significant for Leb Acöli and Runyoro-Rutooro. There was no significant difference between boys and girls on this subtask.

**Figure 5: % Learners in SHRP schools who could answer 1 Reading Comprehension Question Correctly: English vs. Local Language**



While improvements in these subtasks can seem small, it is necessary to recognize the extremely low point that Cluster 2 languages started from at baseline- similar to where the Ateso language group began in cluster 1. Ateso, it should be noted, performed very poorly through P2, but by the end of P3 was showing significantly higher reading levels in program schools than control schools which could indicate that languages which start extremely low (for reasons having to do with orthography or other factors having to do with the school and home environment) may need more time to find their way.

### Teachers in the Classroom: Evidence from Observations

Observations in 33 P2 literacy classrooms show that teachers receiving program interventions are far more likely than teachers in control schools to plan and implement best practices for reading instruction including guiding learners to read words from printed text (13% control, 83% SHRP), follow printed text with finger pointing (0% control, 72% SHRP), and answer

Teachers will...	SHRP	Control
<b>Guide learners to read words from printed text</b>	<b>83%</b>	<b>13%</b>
<b>Guide learners to follow text with finger pointing</b>	<b>72%</b>	<b>0%</b>
<b>Teach in local language</b>	<b>83%</b>	<b>67%</b>
<b>Write lesson plans incorporating EGR methodology</b>	<b>78%</b>	<b>47%</b>

comprehension questions based on the story read (0% control, 50% treatment). Additionally, teachers in program schools were more likely to teach in the local language of instruction and more likely to teach according to regularly written lesson plans that incorporate steps of the EGR reading methodology.

Of those interviewed, 96% of cluster 2 program teachers received training in the program's early grades reading methodology, and 93% report having their lesson plans reviewed at least once per term. Still, these teachers are not provided adequate in class support. Coordinating Centre Tutors (CCTs) are facilitated by the program to provide additional mentoring and support to early grades reading teachers twice per term, yet 30% of program teachers said they had never been observed in their classroom by a CCT at any time in that school year.