

Mango Tree's Northern Uganda Literacy Program (NULP)

Program Overview

Since 2010, Mango Tree has been supporting teachers and schools in the Leblango language community with the Northern Uganda Literacy Program. The main goals of the program include: 1) Increasing literacy rates through local language instruction; 2) Enhancing education quality through effective materials and teachers; and 3) Fostering a culture of reading among pupils, parents and communities within a cost-effective and scalable framework.

Researchers from the Universities of Illinois, Minnesota, Wisconsin and the Copenhagen Business School collaborated to conduct a randomized control trial (RCT) of the Mango Tree program in the Lango Sub-Region over 4 years to measure the effectiveness of the NULP instructional model, teacher training, support supervision and literacy materials on mother tongue and English literacy.

Research Design

This research studied 128 schools, which were randomly assigned to either:

- the Full-Cost NULP implemented by Mango Tree's field officers, who are former early grade teachers and retired government teacher trainers, or Coordinating Centre Tutors (CCTs);
- a Reduced-Cost version implemented entirely by CCTs that can be scaled at a cheaper cost through local government structures;
- a Control group receiving the status quo materials and support.

We present results from a longitudinal analysis of 9,510 learners in 42 Full-Cost schools, 10,176 learners in 44 Reduced-Cost schools, and 9,274 learners in 42 Control schools. The learners were tracked upon entering Primary 1 in 2014 through their transition out of Primary 3 in 2016. We also compare the NULP to the School Health and Reading (SHRP) Program, which was rolled out in 2017 by the Government of Uganda with the support of RTI/USAID and has formed the basis for a national literacy model taken to scale with funding from the Global Partnership for Education. These comparisons are important, as they demonstrate stark differences in results across the same sub-region, schools and teachers in Uganda.

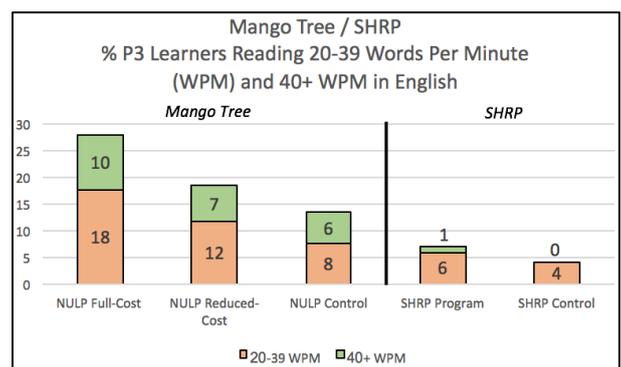
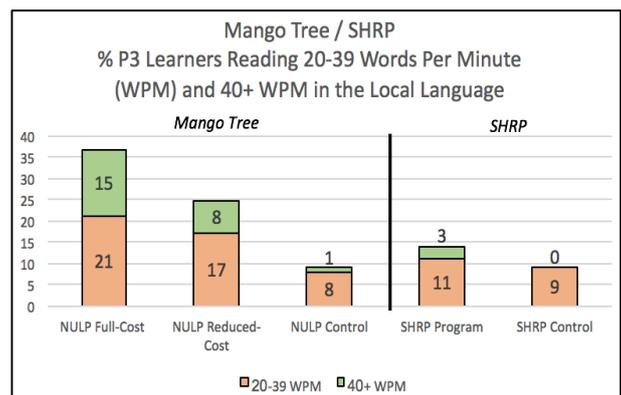
Results

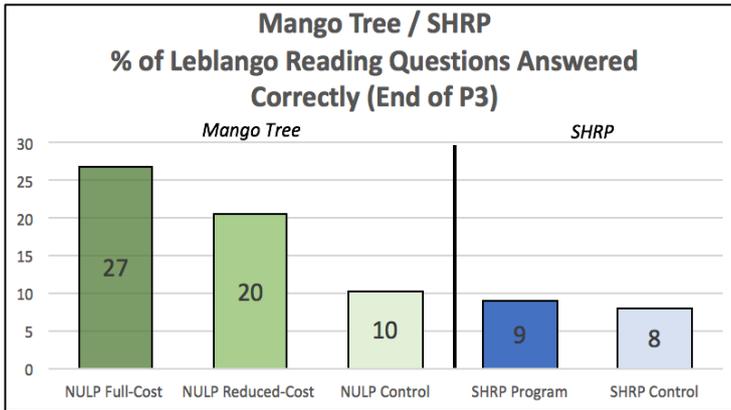
P3 learners in the Full- or Reduced- Cost programs do considerably better in **both Local Language (Leblango) and English Oral Reading Fluency** than students in the Control, and students in SHRP.

In Leblango, 36% of learners in the Full-Cost group can read over 20 words per minute (WPM) by the end of Primary 3; 15% of those learners can read more than 40 WPM. Even in the Reduced-Cost group, 17% of pupils can read at the 20-39 WPM benchmark and an additional 8% can read 40 WPM. By the end of P3, over 80% of learners in Full-Cost schools are reading over 5 WPM, indicating they have achieved at least emergent literacy levels in their local language.

The NULP and SHRP control groups perform similarly, while the gains achieved among NULP students in both the full and reduced cost program are far more striking than those in the SHRP program.

Learners in the NULP program also show extremely large gains in English reading. Although NULP control students perform at a somewhat higher level than those in SHRP, the gains among NULP learners are much more pronounced than those in the SHRP program. As with Leblango literacy, over 80% of learners in Full-Cost schools are reading over 5 WPM, indicating they have achieved at least emergent literacy levels in English.

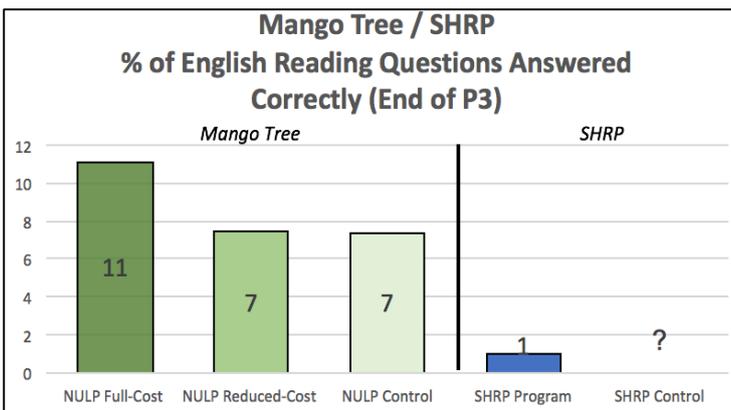




Not only do NULP learners read with more fluency, they also comprehend more of what they are reading.

In the Leblango Full-Cost program, learners understand and correctly answer 27% of the **Reading Comprehension** questions they are asked after reading a story.

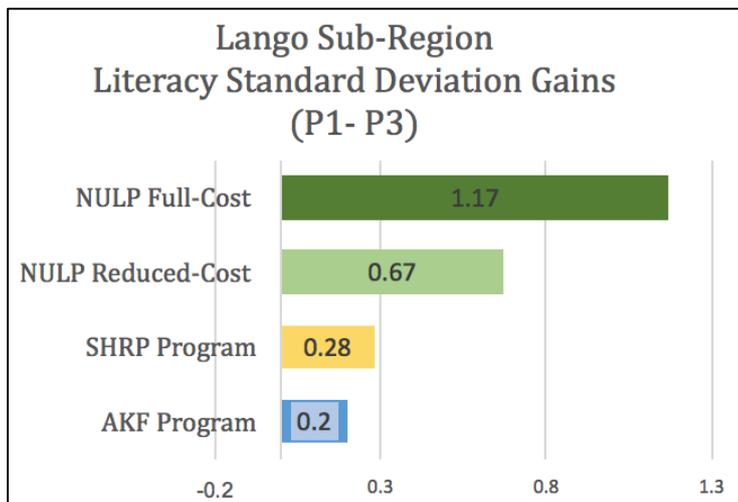
Reading comprehension results are significantly larger for both the Full-Cost and Reduced-Cost versions of the program than they are for learners in SHRP schools.



In English, learners in Full-Cost schools can correctly answer 11 percent of the questions posed to them about the reading passage.

The effects of the NULP Full- and Reduced-Cost program are significantly larger than the effects of the SHRP program.

We also compare the overall effects of the NULP, measured in standard deviation gains of Oral Reading Fluency (WPM) in Leblango, to other organizations operating in the Lango Sub-Region.



The Full-Cost NULP increased learning by 1.17 standard deviations for students receiving the program from P1 to P3. The Reduced-Cost NULP increased learning by 0.67 standard deviations for students receiving the program from P1 to P3.

For SHRP pupils with four years of the intervention, the effect size in Leblango Oral Reading Fluency was 0.28 standard deviations. A similar program implemented by the Aga Khan Foundation under their Read to Learn model yielded 0.20 standard deviation gains.

By the end of third grade, the NULP raises reading scores by 1.2 standard deviations - one of the largest gains in reading ever achieved by a randomized education intervention, according to a recent systematic review of the literature (McEwan, 2015).

What Makes the Mango Tree Program Different?

Many projects focus on the same system-level investments (materials, teacher training and support, phonics and whole text methodologies). But, the Mango Tree program is different in a number of ways: 1) **Slower pace** – Content is introduced slowly (2 years for all of the letters) with lots of time for repetition and revision; 2) **Literacy readiness** – All of P1 Term 1 is devoted to developing learners' literacy readiness skills; 3) **Focus on language** – Intensive, ongoing local language training and support for teachers; 4) **Contextualized materials** – Developed in partnership with teachers and CCTs to reflect the reality of teaching in resource-poor, overcrowded classrooms; 5) **Training through instructional videos and expert mentor teachers** – To ensure consistency and accuracy in content and messaging delivered by different trainers, and demonstration of best practice from peers; 6) **Parent and community engagement** – Including literacy training, literacy report cards, radio outreach, reading at home and home assessment.