Delivering Reading Materials through SMS in Zambia

Background
Children in rural Zambia have limited access to reading materials. Data show that as many as 58 percent of elementary school students have no access to reading materials at home.

With funding from the All Children Reading Partners (USAID, World Vision and the Australian Government), Creative Associates International designed and implemented Makhalidwe Athu (MA), a project that used cell phone messaging to send households short stories in the local language for Grade 2 and Grade 3 students to read at home.

Intervention
MA sent participant households three text messages on their mobile phones each week comprising a short story that caregivers and students could read together. In addition, participants could call in for a pre-paid recorded voice message (IVR), which included comprehension questions and a recording of the story itself.

Stories were “crowdsourced” from the local communities that learned about the program through local media and community meetings. The objective was to provide stories that were culturally relevant to children in these communities, thereby promoting fuller engagement of children and their families with the stories. Stories were levelled and adapted to the SMS format by Creative reading specialists and Ministry of Education staff, including teachers.

Participant households could also attend monthly meetings where MA’s community mobilizers provided guidance on how to read and listen to the stories with children. MA also provided children with a notebook and encouraged them to record the stories.

During the 9-mont implementation, program take-up was high. Eighty-one percent of caregivers in participant households showed the SMS to their children at least once a week, and 93 percent of treatment households attended at least one monthly MA meeting.

Evaluation
NORC at the University of Chicago conducted an evaluation of the program, as part of the Reading and Access contract. Eighty schools were randomly assigned into treatment and control groups. Random samples of students from each school, as well as their caregivers, were surveyed at baseline in January 2016 and at endline one year later.

The reading assessment used was a version of the Early Grade Reading Assessment (EGRA). A caregiver assessment and a student questionnaire were also administered at baseline. In January 2017 NORC surveyed the same caregivers and students.

In total 2,054 students were included in the study: 1,021 in the treatment group and 1,033 in the control group.

Findings
MA had a positive impact on three of five EGRA subtasks evaluated, namely non-word reading, Oral Reading Fluency (ORF) and reading comprehension. For the other two
measured subtasks, letter sound identification and listening comprehension, the estimates are negative but small and not significant.

We did not find any evidence that the program changed children’s attitudes towards reading, measured by whether they enjoy reading at home or in school.

Caregiver responses indicated the program had a positive impact on the frequency with which children read with their parents; by contrast children’s responses showed no changes in time spent reading with parents. As such, the results for MA’s impact on time spent reading with a parent are inconclusive.

On the other hand, we found positive impacts on the frequency with which children read on their own at home. This result was observed in both caregivers’ and children’s responses. Other children in participating and neighboring households were found to join the MA children when reading the SMS stories.

We also conducted a cost-effectiveness analysis of the program and estimate that the costs to expand it would be between US 20 and US 22 per child.

**Recommendations**

Given the positive findings on the project’s impact, consideration should be given to scaling up the program. However, any scale-up decision must take into consideration the following questions:

1. **How feasible is it to replicate the MA program in its entirety?** MA consisted not only of the delivery of SMS stories, but also of monthly meetings with parents to provide guidance.
on how to use the SMS stories to support reading. Replicating this intervention at scale may not be financially feasible. Consideration should be given to alternative, lower-cost means of supporting parents, such as continuing the use of community volunteers and integrating guidance into school-staff lead PTA meetings.

(2) **Are the gains in reading sustainable?** The endline data were collected just after the implementer stopped sending messages and conducting monthly meetings with caregivers. It would be useful to document whether these gains in EGRA scores and reading habits are maintained over time even in the absence of the program.