

LESS THAN THREE HOURS OF REMEDIAL TUTORING BY COMMUNITY EDUCATION VOLUNTEERS DELIVERS OVER ONE YEAR OF HIGH-QUALITY SCHOOLING.



CONTEXT

As a consequence of the COVID-19 pandemic, learners in Uganda experienced among the longest school closures worldwide—22 months—and it is estimated 15 million Ugandan children did not attend school for nearly two years. Pre-pandemic, learning outcomes in Uganda were among the lowest in the world—only 6% of Primary 4 students could read a paragraph and only 2% could solve a simple math problem. Compounding these low learning levels, statistical models predict school closures led to 2.8 years of long-term learning loss.

PARTNERSHIP WITH YOUTH IMPACT AND TRIAL GOALS

In response to the growing learning crisis, Building Tomorrow, in conjunction with Youth Impact—a Botswana-based, evidence-driven non-governmental organization—began a randomized controlled trial (RCT) to investigate the effectiveness of low-technology interventions in stemming learning loss. Building Tomorrow, as one of five replication trials of a larger study on low-tech remote education, engaged a corps of Community Education Volunteers (CEVs), resident members of their communities who donate their time to support education, to facilitate the treatment described below.

Building Tomorrow's stated goals at the outset of the RCT were to determine: 1) Can CEV-led learning compare with other delivery models such as teachers and NGO-hired facilitators (who facilitated treatment in Youth Impact's other replication trials)?; 2) Is there an evidence base for greater levels of formalization for the CEV program nationwide, and is there a comparable value of professionalization of CEVs akin to Community Health Workers?

TRIAL DESIGN

BASELINE	TREATMENT	ENDLINE
October 2021	Eight weeks in Nov. 2021-Jan. 2022	February 2022
<p>180 CEVs helped select 2,138 LEARNERS across nine districts and 195 schools for the RCT.</p> <p>All learners received a baseline assessment in numeracy to determine their learning level among: 1) Place value; 2) Addition; 3) Subtraction; 4) Multiplication; 5) Division.</p> <p>Learners were subsequently randomly assigned to each of the three treatment groups explained under "Treatment" at the right. Each treatment group contained a similar balance of learner demographics and learning levels.</p>	<p>781 CONTROL GROUP LEARNERS received no intervention.</p>	<p>All learners from all three treatment groups received an endline assessment in numeracy to determine their final learning level.</p>
	<p>792 SMS GROUP LEARNERS received a set of practice numeracy problems once per week via SMS.</p>	<p>Additionally, learners and their guardians participated in an endline survey to learn more about their perspective on the trial and education as a whole, learner's educational status, and educational habits at home.</p>
	<p>565 SMS+PHONE CALL GROUP LEARNERS received a set of SMS practice problems and a 20-minute tutoring phone call with a CEV once per week (160 minutes of phone instruction in total). Students' learning levels were assessed at the end of each week's call. The CEV responsible for each learner was randomized.</p>	<p>CEVs were also surveyed after treatment to learn more about their perceived role in education and their ability to help children learn.</p>
<p>The RCT was conducted entirely within the time frame of Uganda's school closures.</p>		

RESULTS

LEARNING GAINS FOR LEARNERS IN THE SMS+PHONE TREATMENT GROUP TUTORED BY CEVS FOR 160 MINUTES WERE 0.886 STANDARD DEVIATIONS (SD), EQUIVALENT TO UP TO 1.1 LEARNING ADJUSTED YEARS OF SCHOOLING*, AS COMPARED TO THE CONTROL GROUP.

Learning gains for learners in the SMS-only treatment group were 0.206 SD.

*Learning Adjusted Years of Schooling (LAYS) is a measure that standardizes the varying quality of schooling delivered in different locations to compare the quantity (in years) of schooling attained by learners. For instance, learners who have attained 1.1 LAYS have the same learning outcomes regardless of the location and number of nominal years they attended school.

TAKEAWAYS

CEVs have the ability to deliver highly-targeted instruction that leads to positive learning outcomes comparable with more formalized professional or semi-professional groups.

CEVs are viable education extension agents that can provide steady instruction to mitigate learning loss or facilitate learning gains in times of disruption.

Individualized phone-based learning curricula may be a viable option for providing education remotely when school is disrupted or as a highly-targeted complement to support low-performers.