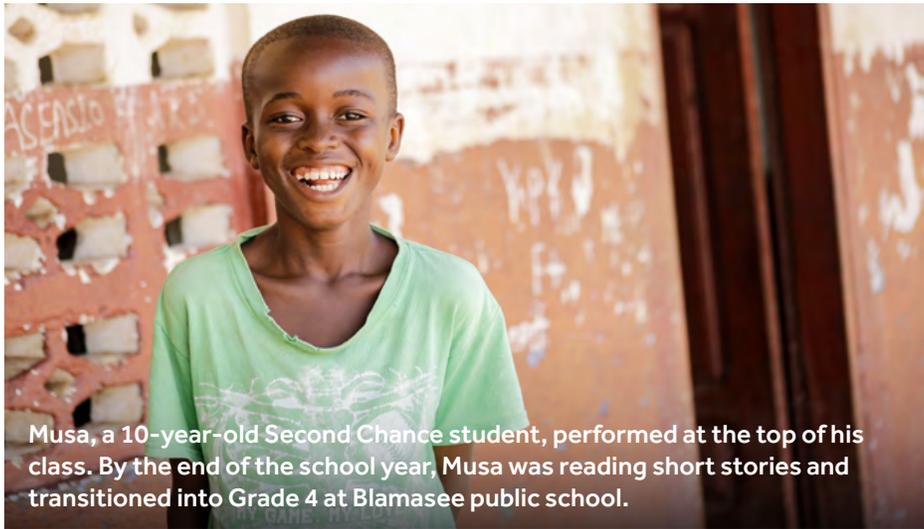

SECOND CHANCE LIBERIA ENDLINE EVALUATION REPORT

OCTOBER 2021





Musa, a 10-year-old Second Chance student, performed at the top of his class. By the end of the school year, Musa was reading short stories and transitioned into Grade 4 at Blamasee public school.

Luminos in Liberia (2020-21 school year)



2,400
students



80 Second
Chance classes



3 implementing
partners

Executive Summary

In 2016, the Luminos Fund launched the Second Chance program in Liberia to help address the country's urgent education needs – including one of the world's highest recorded rates of out-of-school children. To date, Luminos has helped 12,650 Liberian children catch up on learning and reintegrate into local schools. 489 young people have been trained in the Second Chance pedagogy and model.

Previous external evaluation results show that in just 10 months, Second Chance students in Liberia are reading 39 correct words per minute (CWPM) on average, compared to just under 5 CWPM at the start of the program.¹ Approximately 90% of Luminos students transition to mainstream school at the end of the program.

During the 2020/21 school year, results show that the Second Chance program increased oral reading fluency by 28.7 CWPM, with girls progressing 4 CWPM more than boys. These results are remarkable on two accounts. First, the 2020/21 school year was a shorter, 7-month program due to the COVID-19 pandemic (in a typical school year, the Second Chance program runs for 10 months). Second, the 2020/21 school year marked the reopening of classes in Liberia for the Luminos Fund after COVID-19 school closures (mid-March through December 2020). This report summarizes results from the 2020/21 Second Chance endline evaluation conducted by Q&A Services.²

Background: The Second Chance Liberia Program

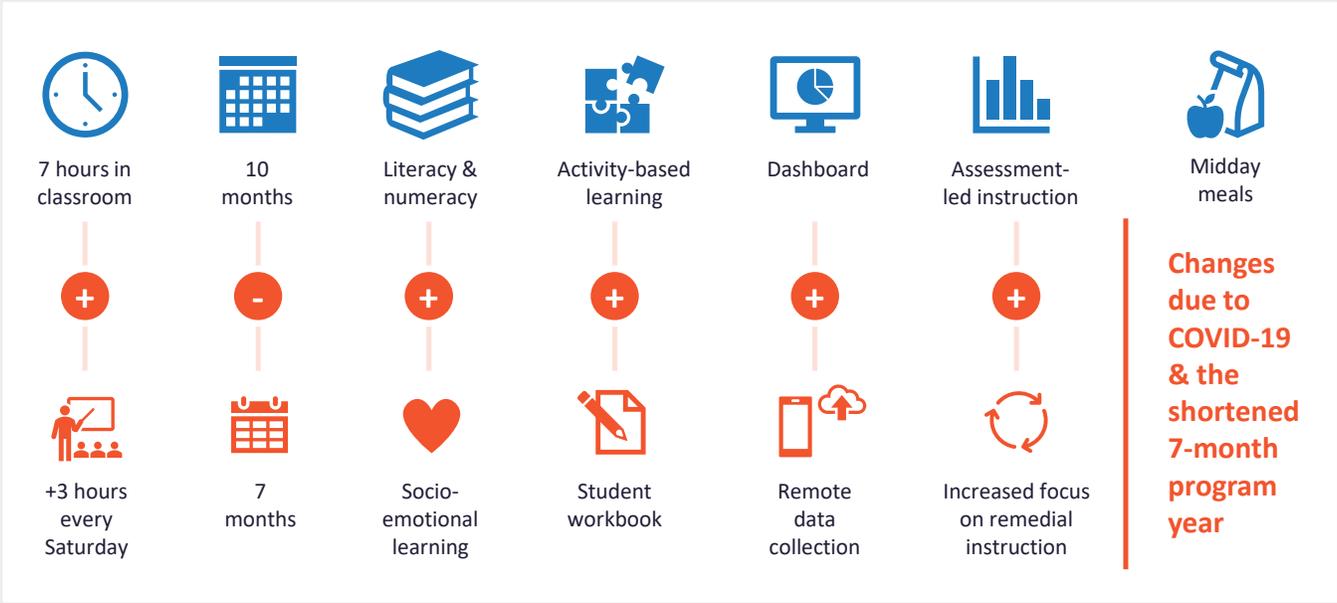
The Luminos Second Chance program is an intensive 10-month accelerated learning program that supports out-of-school children (aged 8-14) to develop key literacy and numeracy skills, and transition back into the formal education system. In 2020/21, the Luminos Fund supported 2,400 out-of-school students across 80 Second Chance classes and three counties (Bomi, Grand Cape Mount, Montserrado) in Liberia with Second Chance. Every year, Luminos works closely with a small group of community-based organizations to deliver the Second Chance

1 Simpson, A. "Luminos Fund Second Chance Program, Liberia, Endline Evaluation Report 2018-19," Q&A Services, June 2019.

2 Simpson, A. "Second Chance Liberia Endline Evaluation 2020-21," Q&A Services, October 2021.

program. These implementing partners each manage a cluster of classrooms.³ During the 2020/21 program, Luminos students attended class for 7 hours per day from Monday to Friday. Approximately 5 hours per day were devoted to reading and 2 hours to numeracy. Due to the shorter 7-month academic year, students also attended classes on Saturday mornings. As with our traditional 10-month program, the 2020/21 program employed child-centered, activity-based pedagogy, assessment-informed instruction, and a phonics-based approach to reading instruction. Students also received a school meal each day. Our teachers – young people from the local community who have a minimum high school education – receive intensive training (approximately 25 days annually) from Luminos on the Second Chance pedagogy and model and are supported with scripted teacher guides and ongoing classroom-based coaching. January 2021 (the start of the 2020/21 program) marked the reopening of classes for the Luminos Fund in Liberia following COVID-19 school closures. Please see Figure 1 below for a complete summary of the 2020-21 program model and minor changes due to COVID-19.

Figure 1: Second Chance Liberia Program Model 2020/21



In contrast to our traditional 10-month Second Chance program, due to the COVID-19 pandemic, the 2020/21 program ran for 7 months (28 weeks) – January 2021 through August 2021 – in line with the Ministry of Education’s 2020/21 official academic calendar. Results for the 2020/21 Second Chance program should be viewed with this important feature in mind.

Evaluation Overview & Methods

The evaluation aimed to demonstrate the impact of the Second Chance Liberia program on student literacy and numeracy outcomes during the 28-week 2020/21 program. The literacy and numeracy levels of a random sample of students across all Second Chance classes were assessed in the first two weeks of the program (baseline) and again in the final week of the program (endline). 345 students ($n_{\text{girls}} = 163, n_{\text{boys}} = 182$) across 80 Second Chance classes were assessed at baseline and endline. The RTI/USAID-developed Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA) tools adapted for Liberia were used at both baseline and endline to assess students on a variety of early grade reading and maths skills. Instruments were digitized using KoBoCollect. Enumerator training and tool piloting were conducted over three days just prior to data

³ In 2020/21, Luminos implementing partners were: Liberia Institute for the Promotion of Academic Excellence (LIPACE), Restoring Our Children’s Hope (ROCH) and BRAC Liberia.

collection at both baseline and endline. Data collection was led by a team of 14 enumerators at baseline and 17 at endline. The majority of enumerators had worked as part of the data collection team in previous evaluations of the Luminos Liberia Second Chance program and were familiar with EGRA and EGMA administration.



Jessica, an 11-year-old Second Chance student, practices reading a story aloud in front of her class.

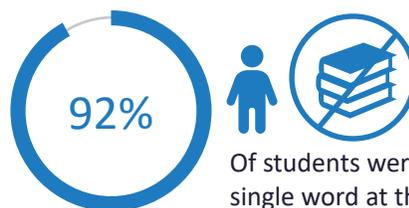
For the first assessment in each class, two enumerators jointly conducted the first assessment, both recording scores for the student, which were used for inter-rater reliability analysis. At endline, if a student was absent, arrangements were made to assess the student at another time. In an effort to understand potential teacher bias (e.g., favoritism towards students who were assessed at baseline during the 7-month program), 146 additional students not assessed at baseline were assessed at endline. Each assessment lasted approximately 45 minutes (20

minutes for EGRA and 25 minutes for EGMA) and was slightly shorter at baseline. At both baseline and endline, data was collected over six days. Data was analyzed using univariate, descriptive analysis disaggregated by gender, implementing partner, and county. Regression analysis was performed using demographic data collected at baseline. Despite some attrition, two-tailed t-tests were used to demonstrate that the results were definitive.

Sample Description

The target sample included six randomly selected students from each of 80 Second Chance classes (assessment sample target, n=480), spread across three counties (Bomi, Montserrado, Grand Cape Mount) and Second Chance classes run by three implementing partners. The 480-student sample gave a confidence interval of 4, with a 95% confidence level. Students were randomly selected using teacher class rosters and a random number generator (RNG) software for Android by RandomAppsInc.

At baseline, 486 students were assessed (47.3% girls, 52.7% boys). The mean student age was 10.4. Less than half (43%) of students reported having previously attended school, and on average, these students had previously spent less than one year in school (0.86 years) before dropping out. At baseline, 92% of students were unable to read a single word of Grade 2 level connected text, and 72% were unable to read a single familiar word.



Overall Results

Results show that the Second Chance program positively impacted student achievement in both reading and math, with statistically significant impact on reading. On reading, students showed improvement across every EGRA subtask, including improvement of 48 percentage points on both letter identification and oral reading fluency of Grade 2 level text, 41 percentage points on familiar words, and 28 percentage points on reading comprehension. In oral reading fluency, students read 31.5 correct words per minute (CWPM) at endline, compared to 2.8 CWPM at baseline.

Results show that the Second Chance program increased oral reading fluency by 28.7 CWPM during the 7-month 2020/21 program. Please see Table 1 and Figure 2 (for a full description of the EGRA subtasks see the Appendix on page 8).

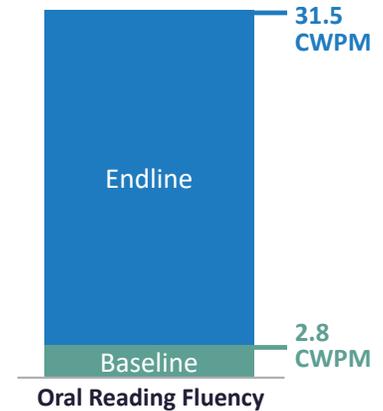
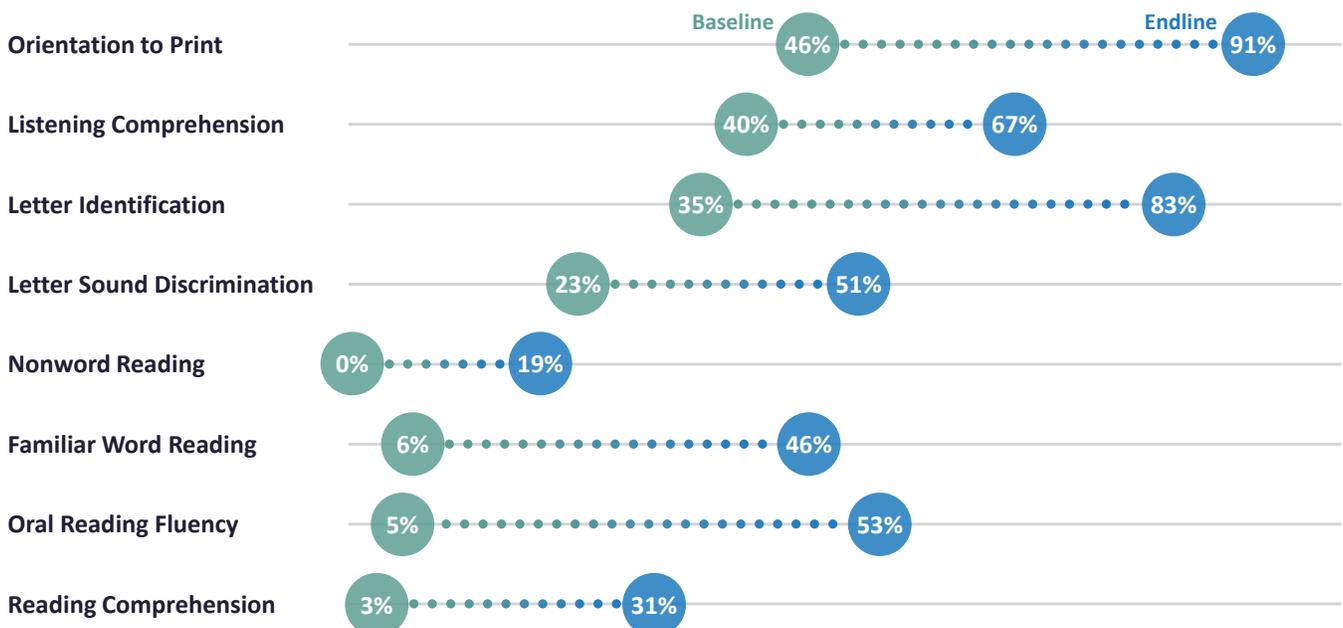


Table 1: Second Chance Liberia 2020/21 Reading Results*

Stage	EGRA subtasks	Baseline		Endline		Difference between baseline and endline	
		Mean score	% correct	Mean score	% correct	Score	% Improved
Pre-Reading	Orientation to Print	6.9	46%	13.7	91%	+6.8	+46%
	Listening Comprehension	1.2	40%	2.0	67%	+0.8	+27%
Initial Reading	Letter Identification	35.3	35%	83.0	83%	+47.7	+48%
	Letter Sound Discrimination	2.3	23%	5.1	51%	+2.7	+27%
	Nonword Reading	0.2	0%	9.6	19%	+9.4	+19%
	Familiar Word Reading	2.8	6%	23.2	46%	+20.4	+41%
Fluency and Comprehension	Oral Reading Fluency	2.8	5%	31.5	53%	+28.7	+48%
	Reading Comprehension	0.2	3%	1.6	31%	+1.4	+28%

* The 2020/21 school year was a shorter, 7-month program due to COVID-19. In a typical school year, the Second Chance program runs for 10 months.

Figure 2: Percent Correct Scores for Reading Subtasks



On numeracy, students again showed improvement across every single EGMA subtask, including improvement of 35 percentage points in number identification, 32 percentage points in number discrimination, 27 percentage points on addition and 17 percentage points on subtraction. As noted, while Second Chance impacted student achievement on mathematics, improvement was less significant than literacy. This makes sense given that 5 hours of the Second Chance school day (approximately 70% of instructional time) is devoted to literacy and 2 hours each day (30% of instructional time) is devoted to numeracy. Please see Table 2 (for a full description of the EGMA subtasks see the Appendix on page 8).

Table 2: Second Chance Liberia 2020/21 Math Results*

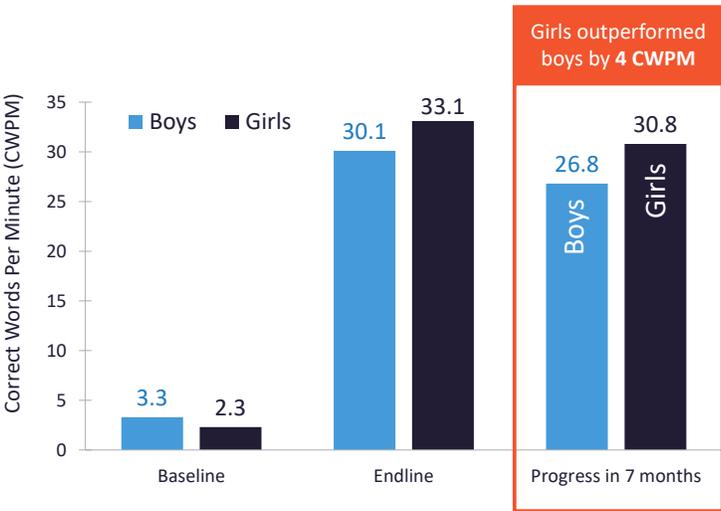
EGMA subtasks	Baseline		Endline		Difference between baseline and endline	
	Mean score	% correct	Mean score	% correct	Score	% Improved
Number Identification	7.1	24%	17.5	58%	+10.4	+35%
Number Discrimination	2.3	23%	5.5	55%	+3.2	+32%
Missing Number	0.3	3%	2.6	26%	+2.3	+23%
Addition	2.6	17%	6.7	45%	+4.1	+27%
Subtraction	1.3	9%	3.7	25%	+2.4	+16%
Word Problems	1.5	31%	2.4	48%	+0.9	+17%

* The 2020/21 school year was a shorter, 7-month program due to COVID-19. In a typical school year, the Second Chance program runs for 10 months.

Gender, County, and Partner Comparisons

When disaggregated by gender, results showed that both girls and boys improved across all EGRA and EGMA subtasks, with similar performance for girls and boys. Girls improved 29 percentage points in oral reading fluency compared to 24 percentage points improvement for boys. On average, girls improved 4 additional CWPM on oral reading fluency during the Second Chance program (girls improved 30.8 CWPM, compared to 26.8 CWPM improvement achieved by boys). Girls also showed greater improvement on reading comprehension, improving 32 percentage points compared to 25 percentage points achieved by boys. Please see Figure 3.

Figure 3: Comparison of Girls and Boys Progress on Reading Fluency



When disaggregated by county and implementing partner, results again showed that students improved across all EGRA and EGMA subtasks, with similar gains irrespective of county or partner. The largest learning gains were for students in Grand Cape Mount county who read 32.7 CWPM at endline (improvement of 2.8 CWPM more than students on average across all counties). Grand Cape Mount students also demonstrated the greatest improvement on reading comprehension (improvement of 35 percentage points compared to 28 percentage points for students more broadly). In Grand Cape Mount, some students had previously attended Islamic school, where they studied for long hours learning the Koran and Arabic, which is one possible reason for why Grand Cape Mount students slightly outperformed students in other counties. Again, similar scores across both reading and mathematics sections showed that neither county or implementing partner had a significant impact on outcomes during the program.

Social and Emotional Learning Pilot

During the 2020/21 evaluation, a pilot social and emotional learning (SEL) assessment was conducted in conjunction with the literacy and numeracy assessment. For the SEL pilot study, the International Social Emotional Learning Assessment (ISELA) tool developed by Save the Children was used.⁴ Two subtasks were selected: perseverance⁵ and self-concept⁶. At baseline, one student per Second Chance class (80 total students) were assessed across counties and partners. 56 of these children were available at endline ($n=56$, $n_{\text{girls}}=27$, $n_{\text{boys}}=29$). Overall, students demonstrated 58% improvement between baseline and endline on self-efficacy (86% improvement for girls; 45% improvement for boys). Despite the small sample size, results provide preliminary evidence that, in addition to supporting student development of key literacy and numeracy skills, the Luminos Fund's Liberia program is having a positive impact on broader student development.

Conclusion

Results from the Luminos Fund's 2020/21 Liberia program show that the program positively impacted student reading and math outcomes across all EGRA and EGMA subtasks. **Student improvement in reading was statistically significant. Results show that the average student improved 28.7 CWPM within the 7-month Second Chance program, with girls improving four CWPM more than boys on oral reading fluency.** Outcomes were similar across gender, county, and implementing partner. These results are incredibly impressive given the shorter 7-month 2020/21 program, and the challenges of successfully delivering an education program during the COVID-19 pandemic. Results for the SEL pilot show improvement on self-efficacy, particularly for girls, suggesting possible impact of Second Chance on broader student development, however further research is required. When compared with similar programs in Liberia and globally, results show that Second Chance is a highly efficient and effective way to help vulnerable children catch up on learning.

“Student improvement in reading was statistically significant. Results show that the average student improved 28.7 CWPM within the 7-month Second Chance program, with girls improving four CWPM more than boys on oral reading fluency.”

4 D'Sa, N. (2019). International Social and Emotional Learning Assessment. Adaptation and administration guidance, June 2019. Washington, DC: Save the Children.

5 Perseverance is the ability to stay on task despite the task being difficult.

6 Self-concept refers to the understanding of and ability to express personal preferences, feelings, thoughts, and abilities.

Appendix



Early Grade Reading Assessment (EGRA)

Subtask	Reading skill	Description
Orientation To Print	Concepts of print	Students answer questions on how to hold a book and where the text begins.
Listening Comprehension	Oral language comprehension	Students are asked questions relating to a short text read aloud to them.
Letter Names	Alphabet knowledge	Students read letters and accurately speak their corresponding name in one minute.
Letter Sound Discrimination	Phonological awareness	Assessor reads three words aloud. Students select the word that begins with a different sound.
Nonword Reading	Decoding	Students read simple nonsense words in one minute.
Familiar Word Reading	Word recognition	Students read frequent grade level appropriate words in one minute.
Passage Reading	Oral reading fluency	Students read a short, written passage on a topic that is familiar to them in one minute.
Reading Comprehension	Reading comprehension	Students are asked to answer up to five questions relating to the text they read aloud for the oral reading fluency subtask.



Early Grade Math Assessment (EGMA)

Subtask	Numeracy skill	Description
Number Identification	Number competence	Students are given one, two, and three-digit numbers and asked what the number is in one minute.
Number Discrimination	Comparing numbers	Students are given a series of problems where they are asked to identify which number is bigger.
Missing Number	Number patterns	Students are presented a series of numbers and asked to state the number that belongs in the empty box.
Addition	Addition fluency	Students are asked to solve a series of basic addition problems in one minute.
Subtraction	Subtraction fluency	Students are asked to solve a series of basic subtraction problems in one minute.
Word Problems	Real world problems	Students are asked to solve real world problems using basic addition and subtraction.



The Luminos Fund is unlocking the light in every child. We're working to ensure children everywhere get a chance to experience joyful learning, especially those denied an education by crisis, poverty, and conflict. To date, we've helped 152,051 children get a second chance at education in Sub-Saharan African and the Middle East.

In our Second Chance program, we teach formerly out-of-school children learn how to read, write, and do math – *to learn how to learn* – through a joyful, activity-based curriculum. Second Chance allows out-of-school children to catch up to grade level, reintegrate into local schools, and prepare for lifelong learning.