

# Second Chance

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A longitudinal  
study of  
out-of-school  
education in  
Ethiopia

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The summary of an independent study by the University of  
Sussex Centre for International Education.

THE  
LUMIN  S  
FUND





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# Executive Summary

**The Luminos Second Chance program helps out-of-school children cover three years of learning in 10 months and integrate back into formal school.**

In 2011, the Legatum Foundation (which birthed the Luminos Fund) commissioned a longitudinal study by the University of Sussex. The purpose of the research was to evaluate the extent to which Second Chance creates enduring benefits beyond the 10-month cycle of the accelerated learning program. The study, which was published in 2017, tracks the progress of 625 Second Chance graduates who had transitioned to public schooling, and compares them against a control group of 1,250 government school students.

## **The following key findings emerged from the study:**

1. Second Chance children complete primary school at twice the rate of government students.
2. 75% of Second Chance children were still in formal school after six years compared to 63% of government students.
3. Second Chance children outperform government students by an average of 10% across Math, English, and the local language (Sidama).
4. Nearly twice as many Second Chance children are the highest achievers on standardized tests compared to government students.
5. Second Chance children have higher aspirations for their academic and employment futures than their government school peers.
6. Children who attend the Second Chance program are more confident about their ability to learn than those who do not.

These findings are striking. They demonstrate that the Second Chance program does indeed achieve long-term impact. **The “boost” children get from Second Chance is intended not to bring them merely on par with their peers, but to give them the advantage.**

The activity-based pedagogical design of the program and its student-centered strategies for delivery purposefully establish a robust foundation upon which children can build the habits of lifelong learning.



## **The power of the program lies in helping out-of-school children learn how to learn.**

The University of Sussex longitudinal study provides the clearest evidence that all children can learn. After all, out-of-school children are the “forgotten ones”. They are the children the world largely believes are uneducable.

The target group for the Second Chance program are children from very low income households, who often come from illiterate families. They are latecomers to schooling or have had their learning disrupted by systemic barriers such as poverty, conflict, and discrimination.

Yet, as the University of Sussex asserts, given just how much the odds are stacked up against them, it is truly remarkable that these children are able to unsettle so emphatically the world’s deeply-held assumptions about who can and who cannot learn.

In the following pages, we share summarized highlights from the longitudinal study. The full report is available upon request.





# Ethiopia – National Statistics

2.2M

NUMBER OF CHILDREN  
OUT OF SCHOOL  
(PRIMARY SCHOOL)

38%

PERSISTENCE TO  
LAST GRADE OF  
PRIMARY SCHOOL

27%

GOVERNMENT  
EXPENDITURE ON  
EDUCATION  
(AS % OF GOVERNMENT  
EXPENDITURE)

14%

PERCENT OF  
CHILDREN OUT  
OF SCHOOL  
(PRIMARY SCHOOL AGE)

55:1

PUPIL-TEACHER  
RATIO



# Ethiopian Context

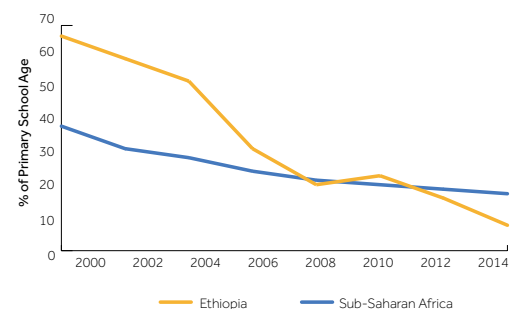
The Government of Ethiopia has made a significant and sustained investment in free, quality, primary education for all its citizens. The Ministry of Education reports that its efforts have yielded substantial gains in access to primary education over the last two decades.

As recently as 2010, a report by the Global Campaign for Education ranked Ethiopia as one of the six "worst places in the world to be a child" with regard to education. Since 2000, though, the Ethiopian national government has made admirable progress addressing the issue of out-of-school children. That year, nearly 60% of primary-age children were out of school. By 2010, this number was reduced by more than half, to just over 25%, and it is now closer to 13%.

Compared to other Sub-Saharan countries with similar GDP per capita, Ethiopia ranks second-highest for its education investment. Since 2000, Ethiopia has also dramatically increased its gender parity index in primary school enrollment from 0.65 to 0.91 (UIS).

While the national government has made notable progress, there remain gaps in the education system that must be filled to achieve universal primary completion. While the percentage of out-of-school children has fallen since 2000, progress has slowed in the past decade. The most dramatic dip in this figure coincides with the abolition of school fees in 2005, with further reductions occurring at a much slower rate.

PERCENT OF CHILDREN OUT OF SCHOOL



Despite dramatic progress, Ethiopia remains among the countries with the highest number of out-of-school children, with an estimated 2.2 million children not in primary school. Only 38% of students who enroll actually go on to complete primary school.

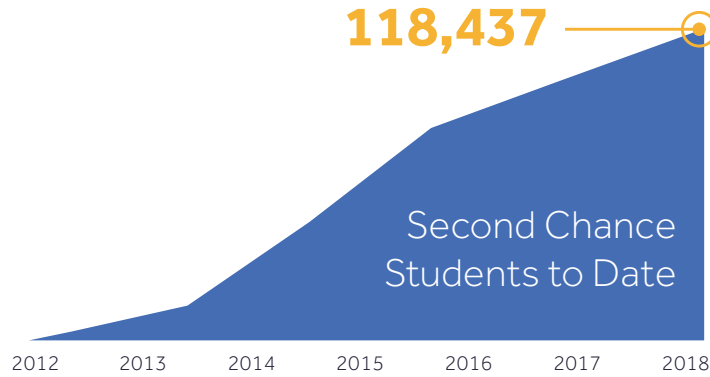
Nevertheless, Ethiopia is a beacon on the continent for a pathway to universal education. Especially with the government's raised investment in education, its well-organized education system, and its positioning as an experimental hub for innovative delivery models, like the Second Chance program.

# The Luminos Program



95%

TRANSITION TO  
MAINSTREAM SCHOOL



To date, we've helped over 100,000 children get a second chance at a good education.

## How the Luminos Second Chance Program Works

<p>10-month Program</p>	<p>Cover first 3 years of school</p>	<p>Play-based learning</p>	<p>Learning how to learn</p>	<p>4x as many reading hours</p>	<p>Costs \$150 per student annually</p>
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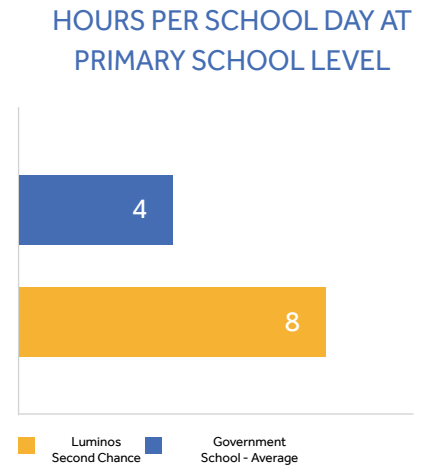
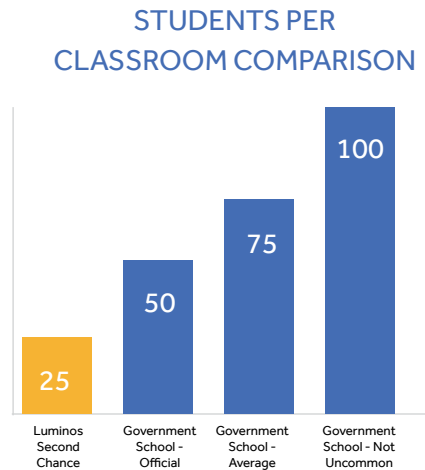
### THREE COMPONENTS OF THE LUMINOS PROGRAM

- Second Chance Classes

accelerated 10-month program
- Parental Engagement

self-help groups and community mobilization
- Capacity Building

government school leaders and teachers



### The Second Chance program offers smaller classes and longer school days

The Luminos Second Chance program (Speed School in Ethiopia) is focused on primary-aged out-of-school children living in remote areas of Ethiopia who have never attended school or who have dropped out. The program provides children the opportunity to reintegrate into government schools. It aims to improve individual learning by seeking not only faster learning but also deeper and more effective learning. The longitudinal study is proof that this program benefits children well into their future lives.



# How the Program Works

**The Second Chance program employs an intensive, child-centered approach to reach the most marginalized populations, children denied an education due to poverty, conflict, or discrimination. The accelerated education model focuses on children aged 8 to 14.**

The program covers the first three years of schooling in the space of just 10 months, and readies students to succeed as they transition into 3rd or 4th grade at their local government schools. Children learn reading, writing, and arithmetic skills through a pedagogy that places the child at the center of the learning relationship. The program exposes children to the sciences, music, art, and the environment. Literacy skills are built and reinforced across children's local languages, Amharic, and English.

Learning is not abstract in the Second Chance classrooms. Instead, it emphasizes practical utility within the local context while also cultivating the children's personal skills. A 7-8 hour-long school day allows each concept to be presented through a variety of pupil-led exercises. The activity-based nature of the program continually engages children. The program draws on the power of play to inspire organic growth and developmentally-appropriate learning.

Classes are supported by "learning facilitators." The majority come to the program as high school graduates recruited from the community. They attend a three-week pre-service, experiential development workshop, which prepares them to facilitate student learning in their classrooms effectively. They are continually cultivated through on-going classroom observation visits and feedback throughout the year.

Class sizes are capped at 25 to 30 which helps the learning facilitators provide individual attention to each child. The structure enables them to create and manage collaborative learning in small groups and appropriately pace the learning process.

Continuous assessments with routine feedback and remediation ensure all children grasp the minimum learning competencies.

Success is measured most simply by the number of children who transition to formal primary school and succeed there.



# The Longitudinal Study

A core question the researchers endeavored to answer is whether the Second Chance program provides a sustainable route back into education for out-of-school children.



Previous studies showed that Second Chance children in their first year of formal government schooling actually made faster learning progress than their peers. However, up until the current study, there had never been a rigorous evaluation of the long-term implications of the program.

How would Second Chance children fare in government schooling over the course of a full primary education? Would they progress, perform, and complete? The immediate goal of the longitudinal study was to answer the above questions as clearly as possible. The broader objective was to see if the study might materialize findings and lessons about the long-term impact of accelerated learning – lessons that might have application both in Ethiopia and in the wider context of Sub-Saharan Africa.

The research team therefore tracked the progress of the Second Chance children, from the time they completed the program in 2011 and transitioned into formal schooling, to the expected conclusion of their primary education at grade 8 in 2017.

To study the educational trajectories of these children both effectively and objectively, the research design included a comparison group of government school students. Researchers selected children for the comparison group with similar risk factors to the Second Chance children to ensure an “apples-to-apples” assessment. By controlling for age, gender, household poverty level, and indicators such as irregular attendance and poor performance, researchers could compare Second Chance’s formerly out-of-school children with students at high risk of dropping out themselves.

Using a household survey and achievement tests, the research focused on three main, interrelated, long-term outcomes: school completion, academic performance, and attitudes towards learning and further education.

THE LONGITUDINAL STUDY  
COMPARED

625

SECOND CHANCE  
GRADUATES

Who completed the 10-month program  
in 2011 and transitioned to formal schooling

AGAINST A CONTROL GROUP OF

1,250

GOVERNMENT  
SCHOOL STUDENTS

Who were already enrolled in  
formal government schooling in 2011

- The Second Chance children were previously out-of-school and had missed out on the first 3 years of education.
- The government students were already enrolled in grades 1-4, but had comparable risk factors.



# The Research Questions

The longitudinal study research was guided by the following four questions:

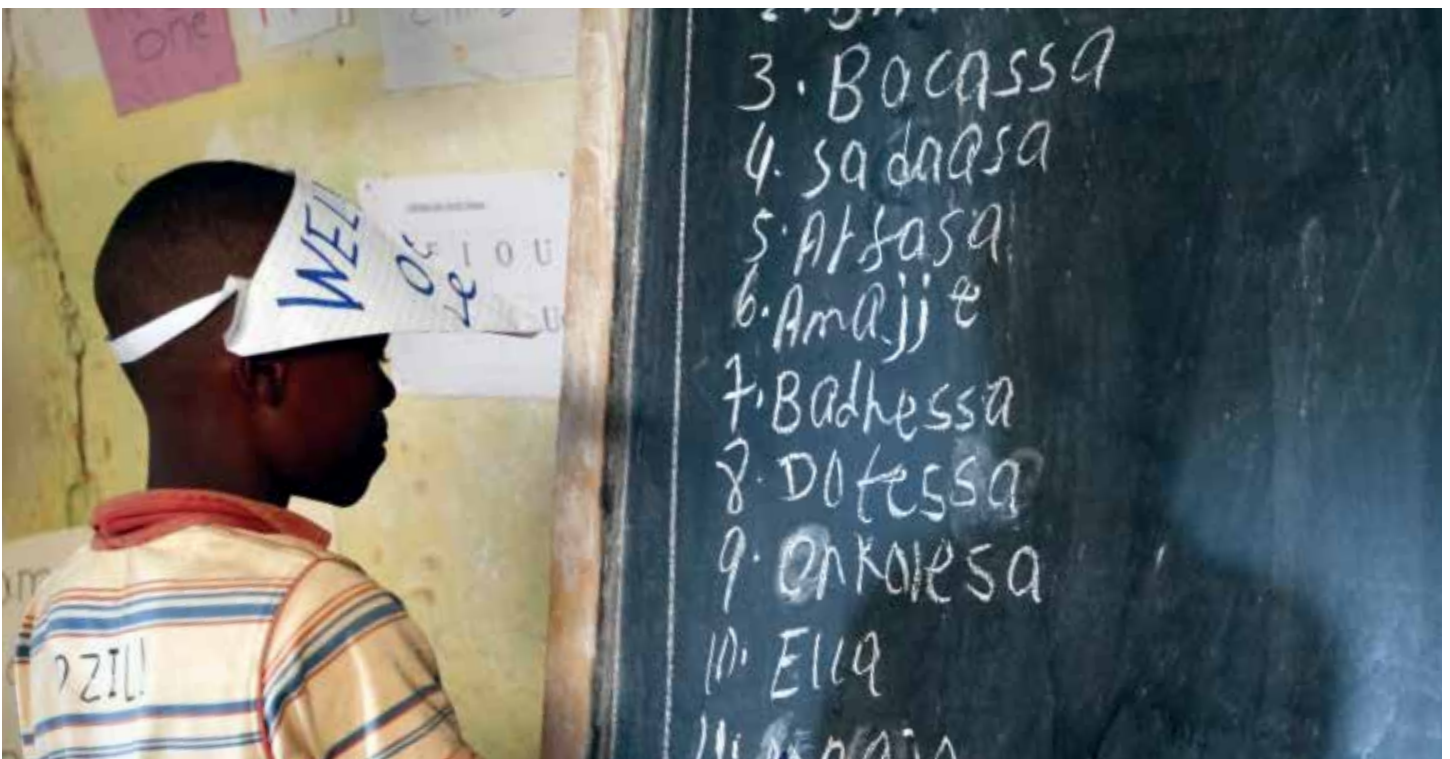


What is the impact of the Second Chance program on learning outcomes?

How does the program influence student retention in, and completion of, primary school?

What factors (both household and student-related) most affect progression and learning outcomes?

How do Second Chance graduates' attitudes to learning and higher education differ from their peers'?



# The Findings

## Persistence and Completion



TRANSITION TO  
GOVERNMENT SCHOOLS

■ Luminos Children   ■ Government Students

Luminos children persist in school longer than Government school children and complete primary school at a higher rate.

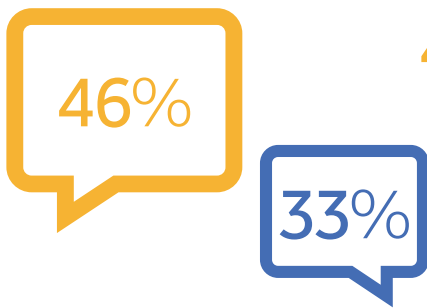


ARE STILL IN SCHOOL 6 YEARS LATER

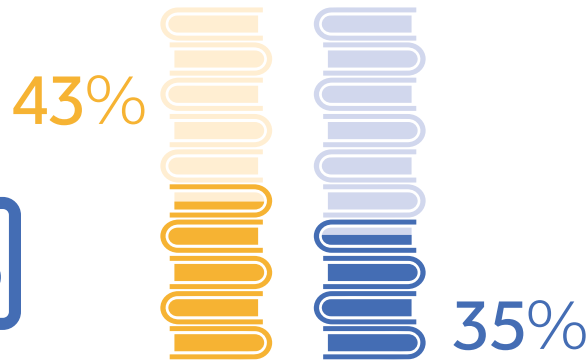


COMPLETE PRIMARY SCHOOL

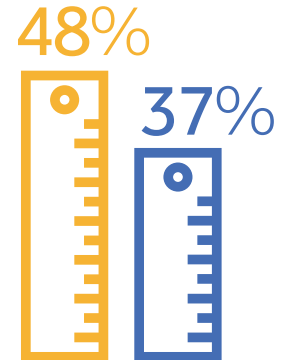
## Learning Outcomes



AVERAGE PERCENTAGE  
CORRECT IN SIDAMA



AVERAGE PERCENTAGE  
CORRECT IN ENGLISH



AVERAGE PERCENTAGE  
CORRECT IN MATH

■ Luminos Children   ■ Government Students

Luminos children outperform their government school peers academically by an average of over 10 percent across the three subjects tested.

# Retention

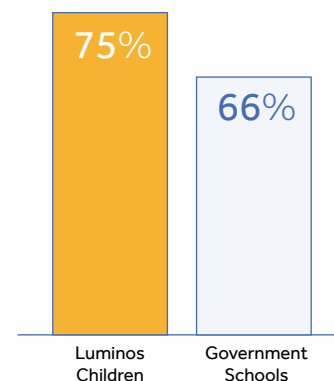


75%

ARE STILL IN  
MAINSTREAM SCHOOL



% OF CHILDREN STILL  
ATTENDING SCHOOL IN 2017



## IS THE CHILD STILL ATTENDING SCHOOL IN 2017?

	Yes	No	Don't Know
<b>Second Chance</b>	430	90	56
	74.65%	15.63%	9.72%
<b>Government School</b>	360	110	75
	66.06%	20.18%	13.76%

The survey of households with students in the study samples found 67.1% were still attending school and 20.5% of students were not attending school or had dropped out. 12.3% of households could not provide information because students no longer lived in the household.

Of all the former Second Chance children tracked, about 74.7% were still in school compared to 66.1% of tracked government school students who were still attending.

Second Chance children have, overall, a lower dropout rate than their government school peers. The dropout rate for former Second Chance children was 17%, compared to 23% at government schools.

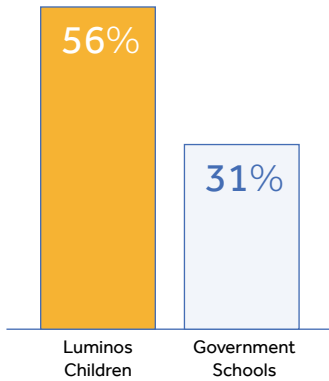
Fewer than 1% of Second Chance children said they left school because they were not doing well. That compares to 8% of government students. The data also revealed that former Second Chance children from the lowest income households were less likely to dropout than government students from the same economic background, which speaks to differences in eagerness to learn and parental commitment to education between the two groups.

In general, the likelihood of children dropping out of school increases with progression through grades, however, with Second Chance children, the trend appeared to be reversed. Older children who first participate in the Second Chance program persist longer in school than counterparts who do not. This suggests that the Second Chance program provides an effective ramp for older children to rejoin mainstream schooling.



# Completion

## MEAN PRIMARY COMPLETION (%)



## PRIMARY COMPLETION BY WEALTH QUARTILE

	Second Chance	Government School
Q1 (children from poorest quartile households)	0.49	0.18
Q2	0.49	0.28
Q3	0.63	0.36
Q4 (children from least poor quartiles)	0.65	0.47
Ratio – Q4/Q1	1.32	2.63

## PRIMARY COMPLETION BY GENDER

	Second Chance	Government School
Male	0.59	0.30
Female	0.52	0.32
Ratio – Male/ Female	1.12	0.93



The longitudinal study reveals that completion rates for primary education were nearly twice as high for Second Chance children than for government school students.

Interestingly, Second Chance children from the lowest income households actually completed primary school at a higher rate than all students from government.

The gap in completion rates between the 'richest' to 'poorest' students is much lower among Second Chance students (a ratio of 1.32) than among government students (a ratio of 2.63).

Higher completion rates among Second Chance children persist across gender. So both boys and girls who attended the Second Chance program are more likely to complete primary school than their government peers.

# Learning Outcomes

Top Achievers ■  
 Middle Achievers ■  
 Low Achievers ■



45%

OF LUMINOS CHILDREN  
ARE TOP ACHIEVERS

## PERCENTAGE OF CORRECT ANSWERS

	Math	English	Local Language
Second Chance	47.6	46.4	42.6
Government School	37.2	32.9	35.1

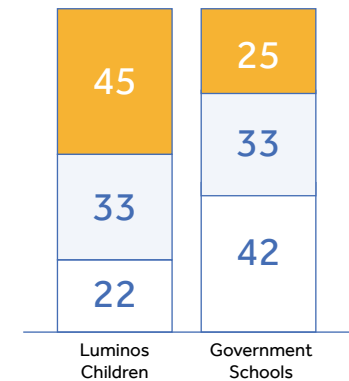
The longitudinal study shows that the academic performance of Second Chance children is consistently better than government students across the three subjects that were assessed – math, English, and Sidama (local language).

On average, Second Chance children answer more questions correctly than government school students whom they outperform by an average of 10 percent across subjects.

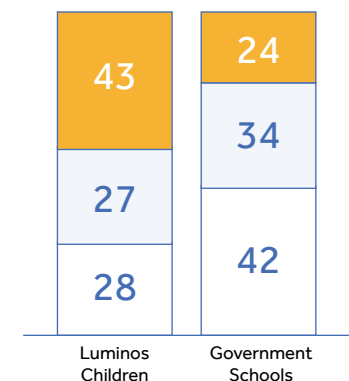
It is also notable across all subjects that almost half of the Second Chance graduates scored among the top performers, compared to only a quarter of government school students.

This suggests that the Second Chance program creates sustained benefits to children's ongoing ability to achieve learning outcomes. Second Chance essentially provides a long-term learning boost.

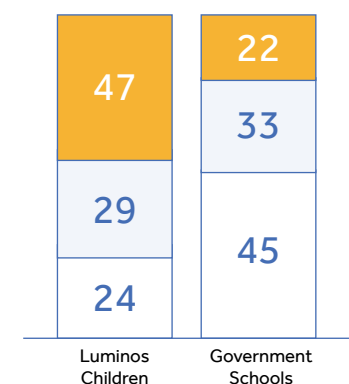
## MATH LEARNING SCORES BY TERCILE



## ENGLISH LEARNING SCORES BY TERCILE

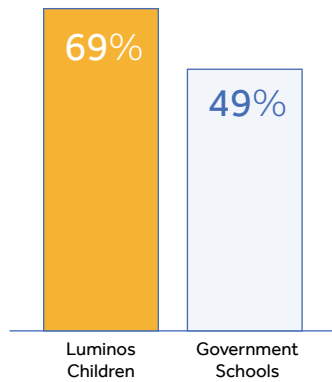


## SIDAMA LEARNING SCORES BY TERCILE

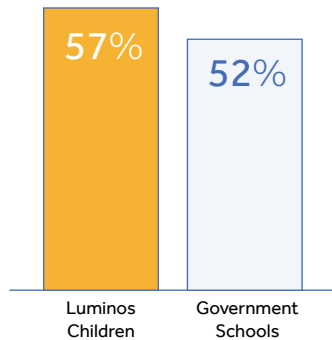


# Aspirations

## ASPIRATION FOR HIGHER EDUCATION



## ASPIRATION FOR HIGH-LEVEL FUTURE EMPLOYMENT



Luminos children are happier and more confident than their peers.



69%

OF LUMINOS CHILDREN HAVE ASPIRATIONS FOR HIGHER EDUCATION

Another compelling result is the differences in the aspirations children have for their future education and prospective employment after school. 69% of former Second Chance graduates stated that they would like to carry on their formal learning beyond grade 12 and into post-secondary education. That compares to 49% of government students.

Crucially, household wealth has less of an effect on the education aspirations of Second Chance students that it does for government school students.

Second Chance children view support from their family as an important factor in encouraging them to continue with their education. Although they do not find lessons in government schools easy, they are motivated to give their best effort in learning. Also striking are major differences in terms of confidence in one's own ability to learn. Second Chance children rate higher than students who did not participate in the program.







# Why Second Chance Works

Second Chance children reported that their accelerated learning program experiences had been very positive and, for some, life-changing. Their praise for the Second Chance program was often contrasted with their current, less favorable learning experiences in the government schools, and in their lives prior to Second Chance.

A key insight from the children is that they believe the Second Chance program has helped them learn how to learn. This prepared them to engage and do well when they transitioned to government schools..

## **The Second Chance pedagogy emphasizes four important ingredients:**

- Emphasis on reading with four times as many hours than the formal classroom;
- Student-centered instruction - recognition that students can learn even if teachers are not teaching directly;
- Integrated lesson delivery, featuring activity-based learning methods that combine different academic subjects within single lessons and feature practical applications with personal skills development; and
- Emphasis on continuous formative assessment, taking time for feedback and remediation.

It appears, for most Second Chance graduates, that the 10 months in the Second Chance program creates a stronger foundation for learning success than three full years in government school.

## **The findings suggest that the “boost” former Second Chance students receive does not only bring them up to the standard of their peers, but also gives them an advantage.**

Second Chance children are able to associate concepts with materials and applications from the world around them. They can personalize the use of concrete materials in concept development. By constructing their own materials for most lessons, Second Chance students learn to transfer new knowledge into different media. This enables visualization and allows them to relate meaningfully to abstract concepts.

“The whole Second Chance experience appears to create learners who are not only reflexive but autonomous and resilient. They discover how to process ideas, make creative and intellectual use of new concepts, solve problems, and work collaboratively in groups.”

*Dr. Kwame Akyeampong, University of Sussex*

## ACKNOWLEDGMENTS

The longitudinal study benefited from the hard work, insights, and time of many individuals. The research team from the University of Sussex, University of Cambridge, and the Institute of Education, University College of London worked collaboratively at all stages of the research to achieve the output.

Ethiopia field research was led by Asmelash Haile Tsegay who tracked the 2011 baseline students and assisted in the translation and piloting of test items.

Research collaborators from Hawassa University, Ethiopia provided support for qualitative research studies.

Geneva Global leadership helped conceptualize the study and the staff, especially in Ethiopia, contributed greatly.

The Legatum Foundation and Luminos Fund provided both impetus and funding for the study.

### The research team included:

Kwame Akyeampong (Team Leader & Principal Investigator)

Marcos Delprato	Jo Westbrook	Rahel Abraham
Ricardo Sabates	Sarah Humphreys	Solomon Wolde
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