

We are grateful to the Ministry of Education, Zambia for their continued support and guidance on this project.

This project and brief were funded by the Bill & Melinda Gates Foundation



Unlocking Quality Education

Analyzing Teacher Behavior in the Implementation of Catch Up in Zambia

Although primary school enrollment rates in Zambia are increasing, many children do not acquire foundational literacy and numeracy (FLN) in the first few years of schooling. According to World Vision, in 2018, 55% of Zambian children in grade 2 could not read a single word of text. Research indicates that children who fail to grasp FLN skills in the early grades often face persistent challenges in catching up with their peers. This, in turn, can have enduring effects on their career prospects, poverty levels, and overall well-being. Our research focuses on teachers as a key stakeholder in improving FLN among primary school learners in Zambia.

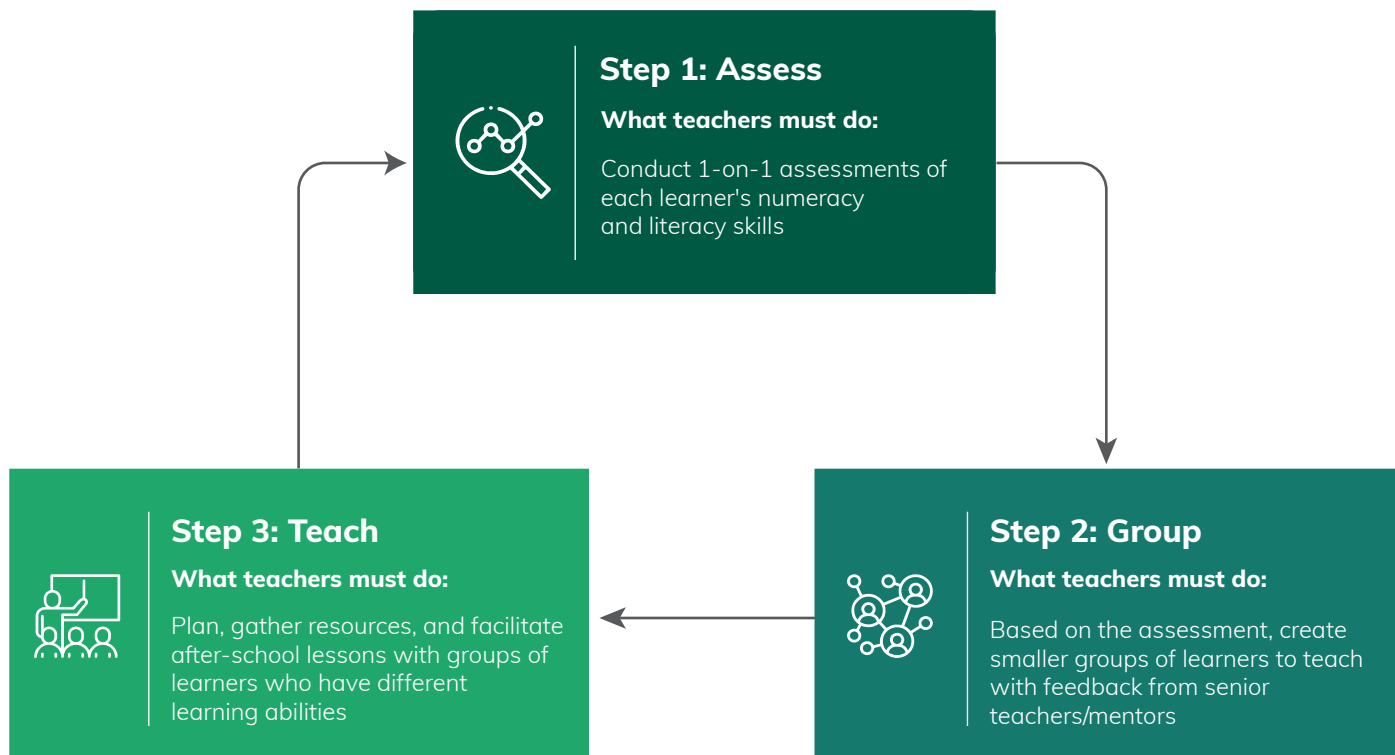
An Overview of Catch Up in Zambia

Catch Up (CU), initiated in Zambia during the 2016-2017 academic year, aims to improve FLN skills among primary school learners. The program, currently covering 8 out of 10 provinces, has expanded to 4,900 schools and impacts approximately 735,000 learners. CU classes are taught outside regular hours, requiring teachers to dedicate one hour daily to facilitating lessons.

Teaching Methodology —

CU employs the Teaching at the Right Level (TaRL) approach, focusing on foundational skills through multifaceted, child-centered, and lively classes. Instead of teaching children at a grade level, teachers facilitate lessons to groups of learners based on skill level.

As primary implementers of CU, teachers must consistently carry out a series of actions to cyclically assess and group learners, while continuously teaching CU; they must assess learners one-on-one to group them at the right level, develop lesson plans using the TaRL method every day, and actively manage classrooms.



These three steps occur throughout the year and involve multiple behaviors, necessitating a behavioral science lens to understand them and shore up existing or potential gaps to ensure TaRL is implemented effectively.

Teacher-Centric Approach and Objective: —

This project's novel approach aims to understand the barriers and enablers teachers encounter in effectively implementing CU. Specifically, it delineates behavioral barriers and enablers influencing teachers' success in implementing CU. It explores how teachers plan and facilitate CU, emphasizing activity selection, classroom management, subject knowledge, resourcefulness, and the appropriate use of teaching materials.

Our research is strategically divided into three phases, each contributing distinct perspectives to enrich our understanding of prevalent barriers in CU implementation, and how to address them through interventions.



Phase 1: Understand (Qualitative and Quantitative)

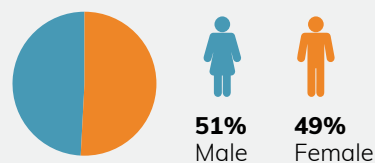
- **Quantitative Phase:** Leverages qualitative findings, providing a more objective and measurable understanding, to identify specific behaviors and target populations precisely.
- **Sample:** 2000 CU teachers in Eastern, Southern, and Lusaka provinces.
- **Methodology:** Phone Survey
- **Framework:** The COM-B model identifies variations in teachers' capability, opportunity, and motivation to plan and facilitate CU well.

Study Demographics

Provinces:

314 862 824
Lusaka Eastern Southern

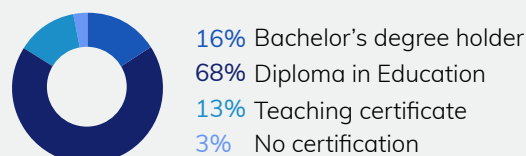
Gender:



Age:

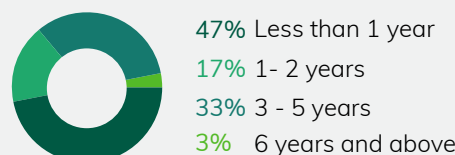
19 35 66
Min Median Maximum

Qualification:



4 teachers
report having
a Master's degree

Experience with CU:



Phase 2: Design (Co-Design)



Phase 3: Assess and Optimize (Experimental testing)

The purpose of this brief is to highlight statistically significant trends in responses based on the quantitative phase of research carried out by Busara in partnership with TaRL Africa and VVOB and outline what it means for the next phase of research.

Framework: Understanding the COM-B Model and its Role in Unraveling Teacher Behavior in Catch Up Implementation —

The COM-B Model, which stands for Capability, Opportunity, and Motivation - Behavior, is a comprehensive framework in behavioral science. It enables us to dissect the intricate factors influencing behavior and understand how they interact to achieve a desired behavior.

This knowledge is pivotal in crafting targeted interventions and support systems to improve the overall success of Catch Up programs.

1

Capability:

The factors that affect a teacher's physical and psychological ability to plan and deliver a CU lesson well.

For example, knowledge about the TaRL method and strength to teach CU every day.

2

Opportunity:

The social and physical (external) factors that affect whether and how a teacher plans and delivers CU.

For example, the opportunity to teach CU provided by time and resources, and the social opportunities provided by positive social norms (when teachers witness their colleagues putting in time and effort to plan and facilitate CU.

3

Motivation:

The internal processes involved in planning and facilitating CU which result in how well a teacher delivers lessons.

For example, teachers remain motivated when they see learners actively participating and benefiting from CU.

Image credit: Midjourney v6.0



Key Findings —

Findings across the sample that we're co-designing for:



Low self-confidence:

2 out of 5 teachers are not entirely confident in their ability to manage Catch Up.



External locus of control:

3 out of the top 4 reasons teachers cited for slow learner progress are external factors. This indicates an external locus of control.



Social norms:

Generally, teachers report positive social norms surrounding Catch Up. On average, 86% of the sampled teachers report seeing other teachers putting in the time and effort required to teach Catch Up well and helping one another when faced with challenges. Seeing their peers supporting each other encourages teachers to follow suit.



Empowering Teachers - Next Steps In This Research

As we embark on the next phase of research, our focus centers on the stand-out barriers and enablers. This involves, designing solutions with teachers and Catch Up stakeholders to address the nuanced challenges beyond isolated issues. Consequently, the solutions developed will be tested in a lab-in-field setting to identify which empowers teachers and creates a more conducive environment for successful Catch Up implementation.

Valuable Findings for Education Practitioners —

While these findings are not the main focus of our upcoming phase, their nuanced insights offer valuable perspectives for practitioners within the education sector.

Gender differences

Male and female teachers experience Catch Up differently.



Stress:

61% of female teachers reported stress in managing learning in CU classrooms, surpassing the 47% reported by male teachers.



Access to refresher training:

Male teachers are more likely to receive an invite to attend refresher trainings. On average, male teachers attended 3 refresher trainings, while their female counterparts attended 2.



Social norms:

“Whenever a teacher faces a challenge with Catch Up, other teachers help them.”- A higher percentage of male teachers (54%) strongly agreed with this statement than their female counterparts (41%).



Class size and time:

Female teachers across all Catch Up levels have a higher average class size (43 learners) than male teachers (38 learners). As a result, more female teachers (41%) report that the time allocated to complete a Catch Up lesson (1 hour) needs to be increased. In comparison, 25% of males need more time to teach a Catch Up lesson.



Voice:

While 44% of female teachers actively shared their experiences with external facilitators of the Catch Up program, a higher percentage of male teachers (54%) demonstrated a greater likelihood of sharing their experiences, particularly with program personnel such as officials from the Ministry of Education.



Self-confidence:

Male teachers report higher self-confidence to manage classrooms, teach the Catch Up curriculum, and manage learner behaviors than female teachers. On a five-point scale, male teachers scored 3.5 when answering a series of questions about how confident they feel to teach the CU curriculum, while female teachers scored 3 out of 5.

Differences by learner groups

We grouped teachers into high- and low-performance groups based on how their learners performed in literacy and numeracy.



Literacy: _____

Stress: High-performing teachers have a lower aggregate stress score compared to teachers with low-performing teachers. On a five-point scale, high-performing teachers scored 3.07, while low-performing teachers scored 3.15.

Social norms: Low-performing teachers report high peer support compared to high-performing teachers. 58% of teachers who agree with the following statement are low-performing teachers: “Whenever a teacher faces a challenge with Catch Up, other teachers help them.”



Numeracy: _____

Social norms: In contrast, more low-performing numeracy teachers report little help from peers compared to high-performing numeracy teachers. 61% of teachers who agree with the following statement are low-performing, “Whenever a teacher faces a challenge with Catch Up, other teachers help them.”

This indicates that the help teachers receive may differ based on the nature of the lessons they teach.

Community outlook: Teachers in low-performing groups report a more positive community outlook compared to high-performing teachers. 57% of the teachers who agree with the following statement are low-performing, “Parents believe that Catch Up is beneficial to their children.”



For more information on this project and Busara’s work in leveraging behavioral science to shape brighter futures, please contact Morgan Kabeer at morgan.kabeer@busara.global