

EVALUATION
REPORT

Baseline Evaluation of the Catch-Up Programme in Luapula Province, Zambia

UNICEF Zambia
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Baseline Evaluation of the Catch-up programme in Luapula Province, Zambia

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ACRONYMS

Acronym	Meaning
CSO	Civil Society Organisation
DAC	Development Assistance Committee
DEBS	District Education Board Secretary
DEST	District Education Support Team
DRCC	District Resource Center Coordinators
ECE	Early Childhood Education
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
ESB	Education Statistics Bulletin
ESSP	Education and Skills Sector Plan
FCDO	Foreign, Commonwealth & Development Office
INGO	International Non-Governmental Organisation
IYCF	Infant Young Child Feeding
J-PAL	Abdul Latif Jameel Poverty Action Lab
MPI	Multidimensional Poverty Index
MoE	Ministry of Education
MoHE	Ministry of Higher Education
NBTL	New Breakthrough to Literacy
NLAF	National Learning Assessment Framework
PEO	Provincial Education Officer
PISA-D	Program for International Student Assessment for Development
PRP	Primary Reading Programme
PSEA	Prevention of Sexual Exploitation and Abuse
PTR	Pupil-Teacher Ratio
ROC	Read on Course
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SBCPD	School-Based Continuing Professional Development
SITE	Step In To English
SPRINT	School Programme of In-Service for the Term
TaRL	Teaching at the Right Level
TMG	Teacher Meeting Group
UNICEF	United Nations International Children's Emergency Fund
VVOB	The Flemish Association for Development Cooperation and Technical Assistance
ZAMISE	Zambia Institute for Special Education
ZEST	Zonal Education Support Team
ZICTA	Zambia Information and Communications Technology Authority

EXECUTIVE SUMMARY

About the Catch-Up Programme

The Catch-Up Programme in Zambia, initiated in 2015 through a partnership involving the Ministry of Education (MoE), United Nations International Children's Emergency Fund (UNICEF), the Foreign, Commonwealth & Development Office (FCDO), Pratham, and the Abdul Latif Jameel Poverty Action Lab (J-PAL). The objective of the programme was to address poor Literacy and Numeracy outcomes in young learners. The Teaching at the Right Level (TaRL) approach was used to train teachers to assess and teach learners based on their learning levels rather than grade or age. The proof of concept of the Catch-Up programme was established during the pilot in 80 schools across districts in the Eastern and Southern province between 2016 and 2017. Since its pilot, the Catch-Up Programme has expanded across nine provinces, targeting over 250,000 learners and 8,476 teachers to enhance their learning outcomes and pedagogical skills respectively. In 2021, the Catch-Up programme was scaled to the Luapula Province with support of The Hempel Foundation and UNICEF.

The Catch-Up programme in Luapula, aims to improve the Literacy and Numeracy levels of 80,000 learners and in turn improve learning outcomes. It involves training teachers, mentors, school administrators, School In-Service Coordinators (SIC), provincial and district staff across 12 districts.

Purpose of the Evaluation

Recognizing the importance of program evaluation, Genesis Analytics was selected to conduct an independent evaluation. This evaluation aims to offer insights into the relevance, coherence, effectiveness, efficiency, sustainability and impact of the programme over a three-year period. This will involve conducting a baseline, midline and endline evaluation and conducting analysis of qualitative and quantitative data to assess the effects of the programme, and identify good practices, innovations and lessons learnt – both at school level as well as at the system level of the Catch-Up programme.

The aim of this retrospective baseline evaluation is to:

- Identify the challenges faced by learners, teachers, parents, and other stakeholders before the implementation of the Catch-Up programme.
- Provide a snapshot of the program's current implementation status, highlighting key strengths and weaknesses.
- Establish a benchmark against which progress can be measured over time.
- Make recommendations for improvement based on the findings of the evaluation.

Key Findings

Relevance

The baseline quantitative data and FGDs with teachers confirmed that learners in Luapula have low basic foundational Literacy and Numeracy skills, in line with broader evidence. The evaluation found that multiple factors have contributed to poor learning outcomes in Luapula. It has been reported that primary school learners in Zambia receive significantly fewer learning hours than their secondary counterparts. Additionally, there is a shortage of classrooms and primary teachers which has contributed to overcrowded environments (with pupil-teacher ratios ranging from 46:1 to 80:1 in primary schools across districts). Parents, caregivers and MoE officials have noted that the overcrowded classrooms make it difficult for teachers to deliver lessons effectively and lessons were reported to be teacher-centred. The province also

has a high number of children with special educational needs (CSEN), yet there are limited resources for these learners.

The design of the Catch-Up programme aims to address many of the challenges noted above. Namely, it increases the number of contact hours learners participate in learning activities and provides teachers with a learner centred approach to remedial learning.

Coherence

The Catch-up Programme was noted to be aligned with the National Literacy and Numeracy Frameworks as it emphasised the importance of learner assessments, local language, tailored support, and holistic learning approaches. Teachers also indicated that the Catch-Up programme aligned with previous initiatives such as New Breakthrough to Literacy (NBTL), Step in To English (SITE), and others, in its objective to improve the Literacy and Numeracy skills of Grade 3 to 5 learners. The evaluation found that the programme stood out to stakeholders due to the TARL approach. However, some teachers expressed concerns about the programme's perceived status as "another intervention" rather than a supportive remedial initiative, highlighting the frequent changes in programmes.

Despite these concerns, the Catch-Up Programme is aligned with Zambia's national policies and complements the Government's commitment to strengthen foundational learning.

Effectiveness

Teachers in Luapula received support from the Special Teachers Union, Zonal Education Support Team (ZEST), District Education Support Team (DEST), and the Teacher Meeting Group (TMG) prior to the Catch-Up programme. Although advantageous, these support systems reinforced teacher-centred instruction. However, stakeholders felt that the implementation of learner-centred approaches through the Catch-Up programme has enabled teachers to tailor their instruction in line with the needs of their learners.

The baseline assessment findings, as reported across the four districts, revealed widespread deficiencies in foundational Literacy and Numeracy skills. In Literacy, a considerable proportion of learners struggled to recognize four letters, particularly in Grade 3. About 47.4% of Grade 3 learners and 32.9% of Grade 4 learners were at beginner level and were not able to recognise four letters during the assessment. Numeracy challenges were also evident; a significant portion of learners were unable to perform basic operations and limited to identifying two-digit numbers. Grade 3 exhibited the highest proportion of beginner-level learners unable to identify single-digit numbers, emphasising the urgency for intervention. While progress was evident in higher grades, a substantial number still faced difficulties in basic operations. Multiplication and division performance was low across all grades. Learner feedback from the FGDs supported these findings.

From the retrospective feedback, learners expressed increased motivation to attend school since the programme rolled out. Teachers and caregivers also highlighted some positive effects of the Catch-Up Programme on Literacy and Numeracy skills. The evaluation also found that at the school level, teachers had limited access to the baseline assessment data post data collection. Also, the data portal only highlighted the performance of learners at the grade, school, or district levels making it hard to monitor how each learner individually performs over time. Despite this limitation, the Catch-Up Programme has the potential to enhance education quality in Luapula, emphasising the need to address assessment data limitations for comprehensive learner support.

The midline and endline evaluations will assess progress towards meeting the set targets, against this background as the baseline.

Efficiency

The programme's phased implementation demonstrated a strategic approach to reaching all 12 districts in Luapula by 2024. The evaluation found that this approach enabled a concentrated focus on each district, ensuring that teachers received sufficient training and assistance prior to implementing the programme in their schools. Programme documents revealed that the budget included allocations to assist the Ministry of Education in scaling, innovating, and testing the program in the province. Budget burn rates will be assessed at midline and endline against the program plan and implementation timeline.

Sustainability

The Catch-Up Programme's long-term viability is threatened by the absence of a comprehensive sustainability plan. The programme's future beyond its initial implementation phase is uncertain due to the lack of a plan to secure continued funding and institutionalise the training component of the programme. At midline and endline, efforts to develop and roll out a sustainability plan will be assessed.

Impact

The Catch-Up programme in Luapula aims to enhance academic performance and long-term learning outcomes for 80,000 learners over three years. It focuses on improving foundational Numeracy and Literacy as both national and international evidence emphasises the crucial role of these skills in learners' school progress and contributing to sustainable development. The midline assessment will provide anecdotal insights into how changes in Literacy and Numeracy levels are influencing broader learner outcomes.

Recommendations

At the school and community level, key recommendations include:

1. Ensuring teachers and headteachers have access to historical learner performance data for targeted support and evidence-driven decision-making;
2. Advocating for more teachers to reduce high pupil-teacher ratios, increasing awareness of the Catch-Up programme among teachers, to address perceptions of its temporary nature;
3. Sensitising parents on addressing challenges related to learners' participation, absenteeism, and dropouts.

At the district, provincial and national levels of the MoE, the evaluation team recommends:

4. The development of a sustainability plan to facilitate the continuity of the Catch-Up programme beyond the donor-funded period.
5. To prioritise and strengthen efforts to institutionalise the training component of the programme for long-term sustainability. This may be achieved through the Colleges of Education.

1. INTRODUCTION

1.1. Purpose of the Report

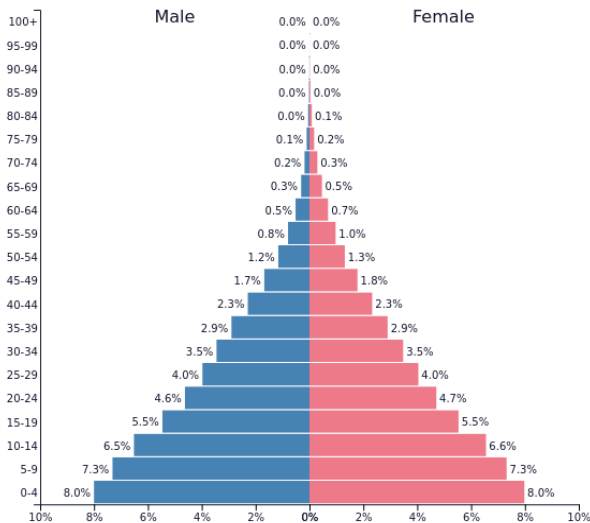
This Baseline Evaluation Report provides a retrospective analysis of the landscape and trends in basic education in Zambia, particularly in Luapula province, prior to the roll-out of the Catch-Up programme. The report aims to establish the status quo prior to the implementation of the Catch-Up programme and serves as the reference point for measuring the progress of the Catch-Up programme through its implementation period.

The primary users of this report include the Ministry of Education (MoE) at the national, provincial and district levels, UNICEF Zambia, as well as the implementing partner, Flemish Association for Development Cooperation and Technical Assistance, (VVOB). Other intended users include the UNICEF regional office and headquarters, key technical partners, donors and funders in the education sector, parent teacher organisations, schools, and other organisations looking forward to adopting remedial learning programmes.

1.2. Context

Zambia is located in southern Africa. The country has a population of approximately 19.6 million people of which 42% are children and adolescents between the ages of 0 and 14¹ and with a population growth rate of 2.8% per year². On the Human Development Index, Zambia ranks 154 out of 191 countries indicating that the country faces challenges with the provision of quality social services including education and healthcare.

Figure 1: Population distribution of Zambia



Over the past five years, Zambia has experienced several events that have influenced its economic landscape. Zambia experienced periodic droughts and climate-related challenges affecting agriculture which is a major sector of the economy. The 2018/2019 drought resulted in food insecurity and increased

¹Zambia Statistics Agency (2022) National Census 2022.

²World Bank (2021). Poverty and Equity Brief. Africa Eastern and Southern.

https://databankfiles.worldbank.org/public/ddpext_download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/AM2020/Global_POVEQ_ZMB.pdf

dependency on food imports and affected 2.3 million people across the country³. Within that same period, 49% of the population were classified as multidimensionally poor according to the 2019 Global Multidimensional Poverty Index (MPI) indicating that 49% of Zambians live in homes that are deficient in one of the three MPI indicators (Health, Education, and Living Standards). According to the 2022 Poverty Assessment survey, 78.8% of the rural population in Zambia is poor while 31.9% of the urban population is poor⁴. Across the provinces, Muchinga, Western, Northern and Luapula provinces are known to be the poorest provinces, of which Luapula is the fourth poorest province in the country⁵. More than 82% of its population lives in poverty, while 67.7% live in extreme poverty.

Zambia has also faced a rapid rise in inflation - from 9.2% in 2019 to 15.7% in 2020 and 22% in 2021⁶. The rise in inflation and the on-set of the COVID-19 pandemic further sent Zambia into a steep recession. While these turbulent times, fiscal imbalances, and reduced agricultural productivity have presented challenges like impaired access to social services, quality education and employment opportunities among young people, the government has made strides to improve the livelihoods of individuals and society at large. This includes social cash transfers, food security packs and various intervention programmes and initiatives such as Scaling-Up Nutrition phase II (SUN-II) programme, the scale-up and promotion of Infant Young Child Feeding (IYCF) practices, the development of radio educational programmes to facilitate distance learning as well as the scale-up of the Catch-up programme⁷.

Since the change in government in 2021, the new government has reinforced its commitment to improving education in Zambia by extending the Education for All policy from primary education to secondary and early childhood education meaning learners can attend pre-primary, primary and secondary public schools for free⁸. The new government also supports the Education Plus initiative, which advocates for free, quality secondary education for girls and boys by 2025, universal access to comprehensive sexuality education, sexual and reproductive health and rights, freedom from gender-based and sexual violence, school-to-work transitions, and economic security and empowerment for African adolescent girls and young women⁹.

1.2.1. Overview of the Education Sector in Zambia

The Zambian formal education system comprises three years of free pre-primary education which is not mandatory, seven years of primary education and five years of secondary school education. When learners are successful with the Senior Secondary Education Certificate, they become eligible to attend higher education or vocational institutions. The duration of the programmes in these institutions may vary from two to four years. The non-formal education system provides educational programmes to individuals who have never attended formal school or who dropped out of formal education. The MoE is primarily responsible for pre-primary education, primary, secondary, and higher education. The Zambia Institute for Special Education (ZAMISE) also plays a crucial role in the education sector as it is the only government institution responsible for training teachers specialised to teach children with diverse learning needs and difficulties at early childhood and primary education levels. While these government institutions play the most critical role in the planning, coordination, and implementation of education reforms in the country, non-state actors including International Non-Governmental Organisations (INGOs), funders and donors, Civil Society

³ FAO (2019). Climate-change vulnerability in rural Zambia: the impact of an El Niño-induced shock on income and productivity. FAO Agricultural Development Economics Working Paper 19-02.

⁴ Zambia Statistics Agency (2023) Highlights of the 2022 Poverty Assessment in Zambia. <https://www.zamstats.gov.zm/wp-content/uploads/2023/09/Highlights-of-the-2022-Poverty-Assessment-in-Zambia-2023.pdf>

⁵ Ibid

⁶ IMF Data Mapper (n.d) 2021 Zambia inflation rate, average consumer prices.

⁷ UNICEF (2021) Country Office Annual Report. <https://www.unicef.org/media/116506/file/Zambia-2021-COAR.pdf>

⁸ UNICEF (2022) Zambia 2022 Education Budget Brief. <https://www.unicef.org/zambia/media/3156/file/UNICEF%20Zambia%20Budget%20Brief%20Education.pdf>

⁹ United Nations (2022) African leaders launch the Education Plus initiative – a huge step forward for girls' education and empowerment in Africa.

Organisations (CSOs) and the private sector also contribute to development of the education landscape and provide support services in Zambia.

The government of Zambia, through the MoE, has made significant investments in expanding and improving access and quality of education systems and infrastructure in the last two decades. With support from key partners, the MoE has implemented the 2022 Education for All policy which allows young children to have free primary and secondary education, revised the 2013 national curriculum and introduced interventions that have paved the way for young learners, girls and other vulnerable groups to access education.

Other notable achievements include, but not limited to the:

- Construction of over 600 primary schools between 2016 and 2020 and an additional 3142 classrooms by 2023 through the Constituency Development Fund.
- Roll out of the Zambia Enhancement Early Learning project aimed at improving access to quality early childhood services for learners between ages 3 to 6 years.
- Introduction of the 2019-2030 National strategy for Water, Sanitation and Hygiene in schools, in 2020, to improve school health, nutrition as well as menstrual hygiene management for girls.
- Introduction of the 2013 National Literacy Framework, 2021 National Numeracy Framework and the 2017 National Learning Assessment Framework.
- Implementation of the Zambia Education Enhancement project between 2017 and 2022 which aimed at enhancing institutional capacity for the implementation of a safe school program that would protect learners from school-related gender-based violence; improve the quality of teaching and learning in primary and secondary schools and increase access to safe schools.

Zambia has also participated in national and international comparative learning assessments to gauge and improve the performance of the education system. This includes conducting Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA) for grade 2 learners, the National Assessment Survey for grade 5 and 9 learners and participating in the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) assessment for grade 6 learners and Program for International Student Assessment for Development (PISA-D) for learners in grade 7.

While these milestones have supported reforms in the education system in Zambia, some challenges have persisted. Net enrolment at the primary level declined from 94.3% to 81.8% between 2014 and 2020, and learning outcomes, across various levels, have fallen below grade level standards, with a significant number of learners not meeting the expected proficiency levels. In 2015, 65% of Grade 2 learners were unable to read a single word correctly in their mother tongue and did not achieve the desired levels in fundamental Literacy¹⁰. The 2016 National Assessment survey revealed similar trends; Grade 5 learners had mean performance scores of 34.97% in Mathematics and 31.07% in English, failing to achieve the MOE's minimum standard of 40%. Other reports indicate that COVID-19 had a negative impact on learning outcomes in Zambia¹¹. The 2021 Midline EGRA report highlighted that the proportion of learners failing to attain the minimum reading proficiency standards rose from 92% to 96% between 2018 and 2021 owing to the school closures and disruption in learning activities that occurred between 2020 to 2021¹².

¹⁰ Brombacher, A., Bulat, J., King, S., Kochetkova, E., & Nordstrum, L. (2015). National assessment survey of learning achievement at Grade 2: Results for early grade reading and mathematics in Zambia. Research Triangle Park, NC: RTI International.

¹¹ Hapompwe, C. C., Asif Mahbub Karim, F. C. G. I. A., Milimo, V., & Kambikambi, T. T. (2020). Assessment of Factors Accounting for Low Learner Outcomes in Core Subjects Among 5th and 9th Graders in Zambia's Public Schools. *African Journal of Education and Practice*, 6(1), 1-18

¹² *ibid.*

In Zambia, a child who starts school at age 4 will complete 8.8 years of schooling by his or her 18th birthday¹³. When adjusted for children's actual learning time and the quality of learning, the total years spent learning is reduced to 5 years¹⁴. In light of the persisting challenges, the Government of Zambia has sought evidence-based solutions to address these challenges of poor-quality education and learning outcomes.

In 2015, the Catch-Up programme was established in response to poor learning outcomes in Literacy and Numeracy among young learners in Zambia through a partnership between the Ministry of Education, UNICEF, FCDO, Pratham, and J-PAL. The Catch-Up programme is a remedial learning programme which provides young learners in grades 3, 4, and 5 with the opportunity to gain basic Literacy and Numeracy competencies by grouping and teaching them based on their level of performance rather than grade or age. The teachers spend one-hour after school engaging learners through interactive and targeted activities that foster Literacy and Numeracy skills which allows them to meet learners at the point of their needs. Since its pilot, the Catch-Up programme in Zambia has worked with 8,476 teachers to improve their pedagogical skills in the classroom across 8 provinces and has targeted over 250,000 learners. The Catch-Up programme uses the Teaching at the Right Level (TaRL) approach, an evidence-based method that assesses, groups, and teaches learners based on their learning levels rather than grade level or age, using interactive activities to accelerate learning. The remedial classes take place after school for one hour and teachers are encouraged to ensure that learning activities are always learner-centred, lively and relatable.

The TaRL approach has been adopted in other countries including Botswana, Côte d'Ivoire, Kenya, Niger, Madagascar, Nigeria and Uganda. In Zambia, the approach was piloted in 80 schools across 4 districts in the Eastern and Southern provinces between 2016 and 2017. Based on the evaluation of the pilot, the programme was scaled to 470 schools in 2018 and 1100 schools in 2018 within the same provinces. Since then, the programme has been scaled to nine out of ten Zambian provinces - Eastern, Southern, Central, Muchinga, Northern, Luapula, Western North Western and Lusaka.

1.2.2. Overview of the Catch-up Programme in Luapula

The Catch-Up programme in Luapula province is being implemented by VVOB with financial support from UNICEF. The Catch-Up programme kicked off in four districts in Luapula in 2021 - Chifunabuli, Mwense, Kawambwa and Nchelenge. It is expected that the programme will cover 12 districts by 2024.

Key Programme Components

The Catch-Up programme in Luapula comprises of the following components:

1. **Establishing effective and innovative teaching and learning methods for foundational learning:** Through teachings from master trainers and support from mentors, teachers are equipped to teach foundational Literacy and Numeracy skills to learners using the TaRL methodology through play, games and other interactive activities.
2. **Ongoing teacher support and mentoring:** Providing a cascade training model which involves training master trainers who in turn train the teachers and the mentors across different locations.
3. **Capacity building of the MoE staff at provincial, district, zonal and school levels:** Supporting the MoE to create training programmes for key MoE staff, arrange logistics, and deliver training. This includes training in leadership and accountability for management staff at the Provincial Education Offices, District Education Offices and School Management levels and is intended to ensure that management provides effective oversight on the implementation of the programme.

¹³ World Bank (2020) Zambia Human Capital Index.

[https://databankfiles.worldbank.org/public/ddpext_download/hci/HCI_1pager_ZMB.pdf?cid=GGH_e_hcpexternal_en_ext](https://databankfiles.worldbank.org/public/ddpext/download/hci/HCI_1pager_ZMB.pdf?cid=GGH_e_hcpexternal_en_ext)

¹⁴ Ibid

In scaling up the Catch-Up programme to the province of Luapula, particular attention was paid towards strengthening the technical, social and financial sustainability of the approach in twofold:

System strengthening: Evolving the teacher training system to a more cost-effective model and possibly integrating it into the MoE's existing School-Based Continuing Professional Development mechanism, School Programme of In-Service for the Term (SPRINT) which would allow for a more effective and lower cost approach to training.

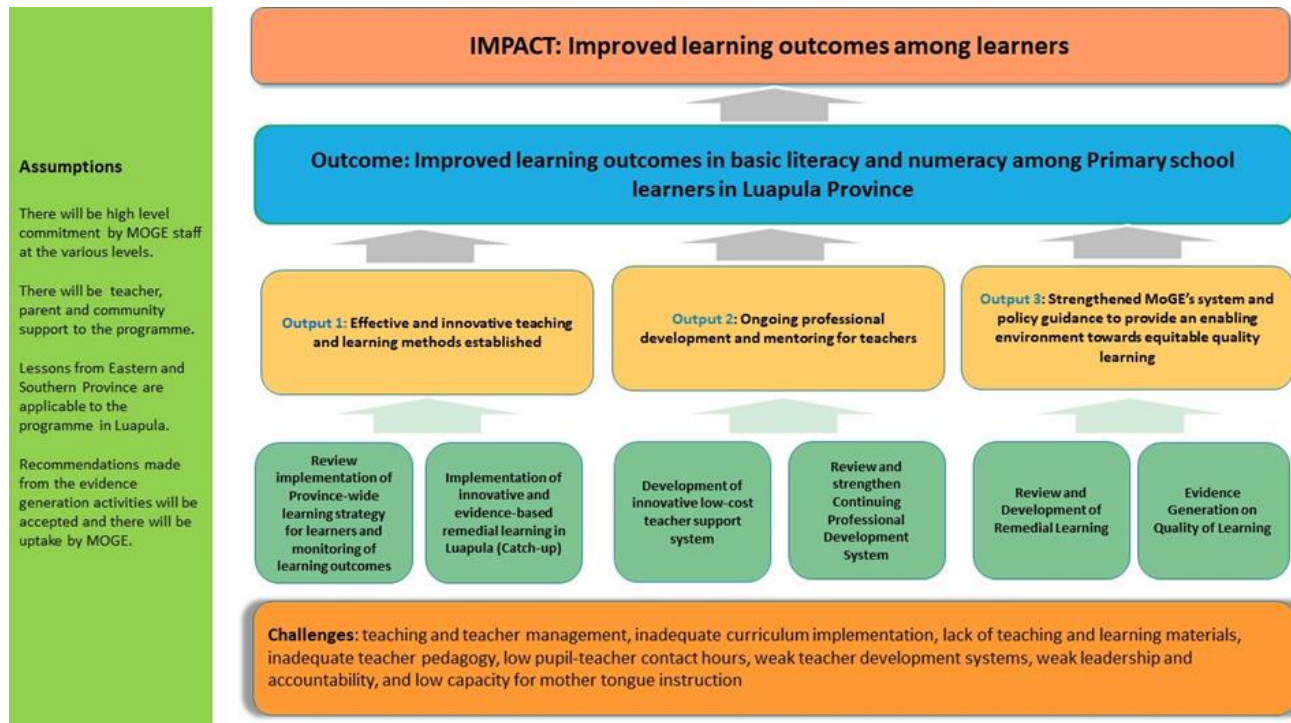
Innovation: Exploring more cost-effective training, mentoring and monitoring approaches, as well as improving data management and use at school level. This includes potential collaborations with organisations like Smart Zambia, Zambia Information and Communications Technology Authority (ZICTA) and mobile network operators to develop innovative digital solutions to facilitate e-training and mentoring sessions.

Upon the conclusion of the scale up in Luapula, it is projected that approximately 80,000 learners attending primary school in grades 3 to 5 across Luapula province will have successfully attained foundational skills in Literacy and Numeracy - 15% more learners are able to read a simple paragraph compared to the baseline, 15% more learners are able to do double digit subtraction from the baseline, and the proportion of learners unable to recognise and/or 2-digit numbers is reduced by half from the baseline values. It is also expected that the acquisition of these skills will contribute to fostering long-term development in the province.

1.2.3. Theory of Change

As discussed in the sections above, the Catch-Up programme ultimately aims to improve learners' Literacy and Numeracy outcomes, and in doing so, improve their overall learning outcomes. The pathways to achieving these objectives are highlighted in Figure 2 below:

Figure 2: The Catch-Up Programme's ToC



2. EVALUATION OBJECTIVES, APPROACH & METHODOLOGY

The Catch-Up programme aims to support 80,000 Grade 3 to 5 learners, 1896 teachers, 632 Mentors, 632 School Administrators and School In-Service Coordinators (SIC), 7 provincial and 36 district staff across 12 districts in Luapula by 2024. Over the duration of the evaluation timeframe, from Baseline through to Midline and Endline, the evaluation will provide an independent perspective of the implementation of Catch-Up. It will provide information on what worked and what did not, highlighting the enabling factors and bottlenecks to implementation, identifying the effectiveness of the programme and provide recommendations to improve and strengthen implementation of the Catch-Up programme. More specifically, the evaluation will:

- Conduct a comprehensive analysis of qualitative and quantitative data to assess the effects of the programme, and identify and document good practices, innovations and lessons learnt – both at school level as well as at the system level of the Catch-Up programme;
- Assess the relevance and effectiveness of the Catch-Up programme in meeting the learning needs of vulnerable children, the appropriateness of teaching and learning materials, and the innovations surrounding teacher support;
- Assess the capacity of the MoE on data management and utilisation and its relevance to the education strategy and teacher training systems and its likely impact in terms of learning outcomes.

This baseline evaluation aims to:

- Identify the pre-existing challenges and needs learners, teachers, parents and other stakeholders faced prior to the roll out of the Catch-up programme;
- Provide a snapshot of the programme's implementation status and identify key strengths and weaknesses;
- Provide a benchmark against which programme's progress can be measured over time;
- Make recommendations for improvement.

2.1. Evaluation Design

To achieve the objectives of this evaluation, the evaluation team used a theory-based evaluation (TBE) approach, which was rooted in the programme's theory of change, presented above in Figure 2. As the evaluation progresses from baseline, through to midline and ultimately to endline, this approach will enable the evaluation to unpack the programme's causal pathways and assumptions. In doing so, the evaluation will unpack where there are breaks in the causal logic and where the assumptions do not hold true, and in doing so, provide recommendations for course correction.

Drawing on the theory of change, together with the OECD's Development Assistance Committee (DAC) criteria, and the evaluation questions presented in the evaluation terms of reference (ToR), the evaluation team developed a comprehensive evaluation framework, which is presented in Annex 1. This framework was used to develop the data collection tools. After the data collection was complete, the evaluation framework provided an objective framework with which to analyse the evaluation findings.

The baseline evaluation was retrospective in nature, meaning that the baseline evaluation was conducted after the Catch-Up programme had been implemented for one and a half years. The evaluation team adopted a mixed-methods approach and utilised both qualitative and quantitative data to facilitate triangulation of findings and uncover key insights. The sections that follow explore how the evaluation team implemented the baseline evaluation.

2.2. Evaluation Questions

As noted above, the evaluation was guided by the OECD's DAC criteria. These criteria together with the key evaluation questions, for the baseline, are presented in Table 1 below.

Table 1: Key Baseline Evaluation Questions

DAC Criteria	Key Baseline Evaluation Questions
Relevance	What were the challenges around teaching and learning before the implementation of the Catch-Up programme? How relevant is the design of Catch-Up in relation to these?
Coherence	What are the past and current interventions in Luapula to address the challenge of poor learning outcomes? To what extent does Catch-Up align with these? What policies are in place regarding remedial learning? To what extent does Catch-up align with these?
Effectiveness	Prior to the Catch-Up programme, what teaching methods were teachers using? What teacher support systems were available to the teachers? To what extent were these effective? What were learners' levels of Numeracy and Literacy prior to Catch Up?
Efficiency	What are the key cost drivers to implement the Catch-Up programme? What are the timelines projected for the implementation of Catch-Up?
Impact	To what extent are Numeracy and Literacy learning outcomes affecting broader learning outcomes?

2.3. Data Collection Tools

The baseline evaluation of the Catch-Up programme employed a range of data collection tools, including key informant interview (KII) guides and focus group discussion (FGD) guides. The tools were finalised based on the desk review of programme documents, the evaluation framework and inputs from the UNICEF team and the MoE. The tools were administered to key stakeholders including learners, teachers, parents and caregivers, head teachers, MoE officials at various departments/levels, Education Officers-Teacher Education (EO-TED) and Provincial Resource Centre Coordinators, District Education Board Secretary (DEBS), the District Resource Center Coordinators (DRCCs) and the Provincial Education Officer (PEO). The data collection tools and the stakeholders who were engaged through these tools are presented in Table 2 below.

Table 2: Data collection tools used across stakeholder groups

Stakeholder Category	Tools
Learners	FGD guide for learners
Teachers	FGD guide for teachers Lesson observation Tool ¹⁵

¹⁵ The lesson observation tool was not administered at the baseline because the evaluation was retrospective in nature and was examining the state of basic education prior to the Catch-up programme.

Stakeholder Category	Tools
Parents/Caregivers	FGD guide for parents/caregivers
Head teachers	KII guide for Headteachers
MoE officials	KII guide for MoE officials
VVOB	KII guide for VVOB
UNICEF	KII guide for UNICEF

2.4. Sampling

Qualitative Sample

Districts: At the district-level, the baseline evaluation focused on four districts namely: Kawambwa, Mwense, Nchelenge and Chifunabuli. The baseline also included interviews with the Provincial Education Office team which were conducted in Mansa District.

Schools: A combination of stratified and purposive sampling was implemented to select schools for the baseline data collection. Firstly, schools in each district were stratified according to school governance i.e., government or community and special needs. Following the stratification, schools were then randomly selected ensuring that each type of school was equally represented. This ensured that there was a diverse pool of Grade 3 to 5 teachers and learners - including children with disabilities - to ensure that diverse perspectives were captured. A total of 12 schools, three in each of the four districts were selected. The data collection in the 12 schools was retrospective which enabled the evaluation team to gain an understanding of pre-existing challenges, establish the pre-existing status quo, gain insights into the appropriateness of the Catch-Up programme and where possible, give recommendations for change going forward.

Learners: learners from grade 3-5 were randomly selected from the government, community based and special education schools to participate in the FGDs. To ensure a balanced representation, a deliberate effort was made to include an equal number of male and female learners. In the special needs schools, learners with different disabilities were included to ensure representativeness.

Teachers and Caregivers: Grade 3-5 teachers were selected to participate in the study from the selected schools. Based on the teacher distributions in the schools, both male and female teachers were selected, with varying levels of teaching experience. Caregivers were sampled from the communities around the school, to ensure that data was collected from caregivers who had children in grades 3 to 5 and attended the schools that were selected for the study. The caregiver group was also composed of males and females with a 50:50 gender distribution.

Government stakeholders and other organisations: These stakeholders were sampled from the pre-approved stakeholder list to ensure that data from respondents who had relevant information was gathered. The stakeholders were selected in collaboration with MoE and UNICEF.

Table 3: Baseline Qualitative Sampling Distribution

Baseline Coverage - 4 Districts			
Stakeholder Type	# KIIs	# FGDs	# of Stakeholders consulted
learners		12	120

Baseline Coverage - 4 Districts			
Teachers		4	32
Parents/Caregivers		4	40
Head teachers	12		12
MoE HQ	2		2
PEO	1		1
EO-TED	1		1
SESO	1		1
DEBS	4		4
DRCC	4		4
VVOB	2		2
UNICEF	2		2
Total	29	20	221

Quantitative Sample

Learners: The evaluation set out to sample 2203 learners across 40 schools in the four districts for the quantitative analysis. However, during the data collection process, the evaluation team discovered that the reported baseline assessment data was not disaggregated by individual learners. For this reason, the evaluation focused on the learner assessment data provided at the school and district level.

2.5. Data Collection Process

This section provides an overview of the data collection process which included training of the data collection team and the data collection exercise. The section details the methods, tools, and strategies employed during the data collection exercise, which played a critical role in gathering the data that underpins the insights and findings presented in this report.

Secondary Data Collection

Key documents including the Catch-Up programme document, baseline learner assessment data files and data on number of teachers trained were provided by the UNICEF and VVOB teams. To supplement this, the evaluation team consulted a variety of open-access databases including Zambia Statistics UNESCO Planipolis, UNESCO Education profiles and also sourced for policy documents, research studies, and reports related to the implementation of the Catch-Up programme in Zambia.

Primary Data Collection

Enumerator training and piloting: The data collection team comprised two moderators, two notetakers and a supervisor. Each team member was selected based on key criteria including interpersonal skills, language capability, education qualifications and prior experience conducting qualitative data collection. All data collection team members were trained to ensure they understood the objectives of the assignment and the importance of the data they were collecting. The training sessions presented an overview of the

Catch-up programme, the purpose of the evaluation, sampling information and also covered a review of all data collection tools, and role playing of interviews to ensure that the team was adequately prepared for the data collection exercise. The data collection team was also trained on research ethics and Child Safeguarding training and Prohibition of Sexual Exploitation and Abuse (PSEA) to ensure that they did not violate any ethics requirements during field activities.

Following the training of the data collection teams, the team visited Chibolya Combined School in Lusaka district to pilot the data collection tools. The school was selected in collaboration with UNICEF and MoE. The main reason for selecting Lusaka was ease of access for UNICEF, MoE and the data collection team and Chibolya combined school was selected as it was one of the schools that participated in the early adoption of the Catch-Up programme. This pilot enabled the evaluation team to test the data collection tools and identify potential blind spots before moving into other districts. The pilot was successful and the data collection tools were found to be appropriate for the data collection exercise.

Data Collection: All enumerators carried a letter from the MoE that was used to access schools, district and provincial offices whilst in the field. This ensured the data collection team had the necessary support and clearance to engage with the stakeholders. Key stakeholder engagements were conducted between September 17, 2023, and September 25, 2023. During this period, the data collection team employed child-friendly and participatory research methods to gather information from the participants. The use of participatory techniques allowed the team to actively involve the participants and obtain a wide range of perspectives. Each KII and FGD lasted between 60 to 90 minutes. The FGDs typically included 8 to 10 participants. The FGDs with the learners included a mixed group of male and female learners who were in grades 3 to 5, with some having different disabilities. The FGDs with the teachers also consisted of a mixed group including male and female teachers with varying levels of teaching experience. This ensured that the evaluation collected perspectives of teachers with different years of experience. It is important to note that the FGDs with teachers in community schools were an exception and consisted of 1-2 teachers due to the insufficient number of teachers.

2.6. Data Quality Control

The enumerators were required to summarise the KIIs and FGDs conducted each day, after which, each summary was reviewed by the data quality controller. Periodic updates on data collection activities were also reported in a WhatsApp group for the evaluation team. Information updates included:

- Number of KIIs/FGDs completed
- Total number of stakeholders engaged for that period.
- Challenges
- Comments and observations
- Recording synced to drive: yes/no

There were three main criteria established to guide data cleaning and analysis: data must be clean, accurate and internally consistent. The evaluation team made additional checks on the quantitative data provided to ensure that all data values were accurate and thematic codes created to analyse the qualitative data were in alignment with the baseline questions in the evaluation framework. To check for consistency and coherence of the qualitative data, the data quality controller also played back at least 10% of the FGD and KII audio recordings daily. All errors and inconsistencies found were immediately communicated to the enumerators for corrective action during the daily debrief sessions. All audio recordings were fully transcribed upon completion of field activities. All transcriptions and audio recordings were uploaded and stored on secure servers.

2.7. Data Analysis

Excel software was utilised to analyse all quantitative data and descriptive statistics were produced to supplement the qualitative findings with findings from the teacher and learner assessment data. The qualitative data was coded using deductive and inductive coding. Deductive coding involved the use of predetermined codes derived from the key questions in the evaluation framework to validate assumptions regarding the programme while inductive coding involved incorporating additional codes based on emerging findings not captured by the pre-existing codes created at the beginning of the analytic process. This ensured that all evaluation findings were treated objectively to ensure all key findings were captured. Following the coding of the qualitative data, the evaluation team conducted a synthesis session to highlight and discuss emerging themes, from which insights were generated and triangulated with the quantitative results and key findings from relevant programme documents and monitoring reports. The key findings that emerged from the analysis are discussed in Section 4 below.

2.8. Limitations and mitigation

As with any research, this evaluation relied on several assumptions and was subject to inherent constraints. The limitations to the methodology are presented in the table below. Despite these limitations, the quality of the evaluation has not been adversely affected. However, the significant delay in acquiring learner assessment data during the baseline period led to the absence of quantitative measures to evaluate learner outcomes.

Table 4: Limitation and mitigation measures

Challenge	Mitigation Measure
Records of recency bias: Given that the baseline evaluation was retrospective in nature, the evaluation team observed recency bias during KIIs and FGDs where stakeholders discussed details of the Catch-Up programme as opposed to recalling prior to the Catch-Up programme.	The evaluation team redirected and reminded the stakeholders to think about events and challenges prior to the implementation of the Catch-Up programme.
Availability of teachers in community schools for FGDs: As part of the evaluation plan, the team planned to conduct a FGD with teachers in one community school, with it comprising approximately 8-10 teachers. However, this was not possible because the community schools had a limited number of teachers, such that only 1 or 2 teachers could participate in each community school.	There was no mitigation measure. The evaluation team conducted FGDs with the few teachers who were available in the community schools.
Availability of stakeholders to participate in key informant interviews: During the data collection period, a few key stakeholders, particularly the PEO, SESO-special education and the EO-TED were unavailable to meet due to other work engagements.	The evaluation team worked with other officials at the provincial office to replace them with similar colleagues who had the relevant information. To this effect, the PEO was replaced with the PRCC, the SESO-special education was replaced with the SESO-language and mathematics and the EO-TED was replaced with the SESO-natural science.
Delay in secondary data collection: During the data collection period, some secondary sources	The evaluation team prioritised gathering and using existing public secondary data while persistently following up with the relevant partners

Challenge	Mitigation Measure
<p>were not publicly accessible to the evaluation team which delayed components of the analysis.</p>	<p>and requesting estimated dates for when the data would be made available.</p>
<p>Quantitative data not learner-disaggregated: Upon gaining access to the baseline learner assessment data, it was discovered that the data was not disaggregated down to the individual to indicate characteristics, gender, individual learner scores and needs.</p>	<p>The evaluation team leveraged on the available data to produce detailed insights on learner performance using other characteristics - grade level and districts.</p>

3. KEY FINDINGS

This section discusses the key findings of the baseline evaluation in the following order:

- The relevance section discusses the fit of the Catch-Up programme with the needs of the programme's target beneficiaries and communities within the country and province's context.
- The coherence section discussed the extent to which the Catch-Up programme complements the relevant education policies and other interventions aimed at strengthening early education in Zambia.
- The effectiveness sub-section discusses what support systems were available prior to the catch-up programme, teachers' level of engagement with them, and the initial impressions of the Catch-up programme among the target beneficiaries.
- The efficiency sub-section highlights the resource allocations and timelines set for the roll out of the Catch-up programme.
- The sustainability sub-section highlights how the programme aims to be sustainable beyond the initial funding period
- The impact sub-section highlights the role of Numeracy and Literacy on broader learner outcomes.

3.1. Relevance

This section explores the reported experiences, needs and challenges of learners and teachers in Luapula before the implementation of the Catch-up programme and explores the extent to which Catch-up is designed to address these needs and challenges.

According to the 2020 Education Statistics Bulletin (ESB) learners in Luapula at the primary-level had a limited number of learning contact hours compared to secondary school learners. This was, in part due to infrastructural and environmental factors including, shortage of teachers, inadequate classroom sizes and insufficient classrooms which made teaching and learning activities difficult. According to this bulletin, primary learners received an average 3 to 4 hours of contact time compared to secondary learners who received as much as 5 to 6 hours¹⁶. Grades 3, 4 and 5 learners across Luapula received the least contact hours - 4.0, 4.0 and 4.9 hours respectively while learners at the same grade level received up to 7.6, 7.7 and 4.9 contact hours respectively in the Central province¹⁷. This disparity in scheduled learning hours and the practice of automatic promotions in schools¹⁸ appears to have reduced the opportunities for young learners to have equal opportunity and the needed time to develop and master foundational skills to progress.

[Prior to the catch-up programme], I wanted to learn how to count the numbers so that we could know how to solve maths. They taught us but not as intensely as they are doing at the moment. - Learner, Kawambwa

¹⁶ Ministry of Education (2020) Education Statistics bulletin. <https://www.edu.gov.zm/wp-content/uploads/2023/01/EDUCATION-STATISTICS-BULLETIN-2020.pdf>

¹⁷ Ibid

¹⁸ Ibid

[Prior to the catch-up programme], I felt good coming to school because when I stay home, they like sending me and I don't like that. Whenever I came to school, the teacher would teach us and laugh. - Learner, Chifunabuli

In terms of the availability and distribution of primary schools in Luapula, 89.5% of the 679 primary schools in the province are situated in rural areas. KIIs and FGDs with key stakeholders confirmed that Luapula had a high Pupil-Teacher Ratio (PTR) which ranged from 46:1¹⁹ as indicated in the 2020 ESB to 80:1 as reported in the interviews. Parents, caregivers and MoE officials also noted that the overcrowded classrooms made it difficult for teachers to deliver lessons effectively. They also expressed their frustration about how learning in the classrooms was often teacher-centred and not learner-centred. The province is reported to have the second highest number of children with special education needs (CSEN) at the primary level - 11,919 learners^{20,21}. However, there were only 89 classrooms available to these learners, out of which 7 were incomplete structures and 4 were temporary²².

Pupil-teacher ratio has been one of those challenges. When you are in the outskirts you find that there are few teachers, maybe the school has only 1 or 2 teachers to run the school, that has been the exact challenge that has impacted negatively on the performance of our learners. - MoE Official

For me I have around 60 learners. So that one on its own is a challenge because on the other hand you are trying to teach and on the other hand you are controlling the situation. You know how children are at a tender age. - Teacher, Chifunabuli

[Prior to the catch-up programme], It felt good coming to school because when I used to stay home, I did a lot of chores and I didn't like that. When I come to school the teacher will teach us and laugh. - Child with Special Education needs, Chifunabuli.

Interviews with MoE officials indicated that other key challenges included limited teacher workforce at the primary level, teachers' attitude to work and the frequent practice of teacher-centred lessons. The interviews also suggested that teachers who displayed a positive and enthusiastic attitude towards learning inspired curiosity among learners and made the classroom environment a safe space for learners to explore ideas and solve problems.

The province sees the challenge of how teaching of learners sometimes seems like business as usual (to teachers). Say a teacher enters the class, he will just introduce the topic, teach like a presentation to the end without seeking contribution from learners, mark and let learners go without making so much concentration on helping learners that are lagging behind. – DRCC, Mwense

¹⁹ Ibid

²⁰ Ibid

²¹ Government of Zambia (2018) National Disability Survey - 2015.

²² Ibid

The KIs revealed that there was a shortage of primary school teachers in the province and that the primary schools lost some of their teachers to secondary schools given that some of the secondary schools provided better benefits including accommodation.

FGDs with teachers revealed that learners were underperforming and did need support in addition to what they could provide in the classroom. For example, prior to the Catch-Up programme, teachers noted that they would occasionally try to provide extra lessons to learners who were underperforming in order for them to Catch-Up with their peers.

We had challenges in the reading ability of the learners, that could have been caused by shortage of staff. You know the school has 1800 plus learners and the number of staff is only 34 against such a big number so learners were not having adequate learning time because of shortage of teachers. - Headteacher, Mwense

The other challenge which children encountered was that of having community teachers. If they do not want to teach, they will not go to teach and for some of them their teaching was not up to standard. Even children who did not feel like learning also just stayed away. - Parent/Caregiver, Chifunabuli

As indicated earlier, Luapula is the second poorest province in Zambia and is largely rural. Parents rely on fishing activities to provide food for their families and generate family income. KIs with parents and caregivers indicated that families also encourage young children to visit the fishing camps to support family income generation activities. While this has immediate benefits for the families and communities, this causes children to sometimes skip school for a prolonged time or eventually drop-out of school. As of 2020, the dropout rate in Luapula sat at 3%, the highest dropout rate at the primary level in the country²³. The Catch-Up programme does not directly address this challenge.

Despite children sometimes missing school for income generating activities, parents and caregivers acknowledged the importance of Literacy and Numeracy skills. They linked the importance of foundational Literacy and Numeracy to fishing in that children apply the skills in the fish markets to carry out basic transactions.

When it comes to mathematics, they [must know] because when you send the child to go and buy something, they [must] come back with the correct change. They [must] even know how much is the change even when someone would want to steal for them. So, knowing maths is important. – Parent/Caregiver, Mwense

The design of the Catch-Up programme aims to address many of the challenges noted above. Namely, it increases the number of contact hours learners participate in learning activities and provides teachers with a more structured approach to remedial learning. While the programme does not aim to address systemic challenges such as teacher shortage, it supports the government's broad commitment to improving the quality of education by building the capacity of in-service teachers and headteachers to strengthen quality

²³ Ministry of Education (2020) Education Statistics bulletin. <https://www.edu.gov.zm/wp-content/uploads/2023/01/EDUCATION-STATISTICS-BULLETIN-2020.pdf>

at the school level. The Catch-Up programme is designed to enable teachers to deliver instruction in a more targeted manner and support learners according to their level of understanding, not grade level. The programme is designed to make teachers more effective instructors who can facilitate learner-centred lessons.

3.2. Coherence

The following section presents the interventions in Luapula that aim to address poor learning outcomes, and the extent to which Catch-Up aligns with these. It also explores the policies in place regarding remedial learning and the extent to which Catch-Up aligns with these.

The National Literacy Framework²⁴ is a foundational document that guides Literacy education across Zambia. It outlines the key principles, standards, and strategies for Literacy development. This framework sets the direction for Literacy education at lower levels, aiming to ensure that learners acquire strong reading and writing skills. It encourages a standardised approach to Literacy and aims to facilitate consistency in teaching methods and materials. It commences in early childhood, engages teachers, incorporates local languages, fosters community involvement, and proposes rigorous progress monitoring. The framework's core areas of focus include curriculum design and development, teacher training, community engagement, assessment, resource mobilisation, and research. To boost Literacy levels, it suggests a holistic approach to the above, combining tailored curricula, competent educators, community participation, and regular assessment to continuously refine Literacy programmes.

Similarly, the National Numeracy Framework²⁵ is a governing framework for Numeracy education in Zambia. It serves as a comprehensive guide for the development and implementation of Numeracy programs, emphasising essential mathematical concepts and skills. It focuses on cultivating early Numeracy skills, integrating Numeracy into the curriculum, enhancing teacher capacity, assessing student progress, and accommodates the use of various local languages to facilitate the adoption of maths skills among learners. To improve Numeracy levels, it recommends tailored curricula, teacher training, community involvement, and regular assessment to ensure effective Numeracy education and lifelong numerical proficiency.

The National Learning Assessment Framework (NLAF)²⁶ serves multiple functions and is significant in the context of education in Zambia. The NLAF not only provides a standardised framework for assessing and measuring learning outcomes at various grade levels but also places clear standards on what learners are expected to know and do at various grade levels. The NLAF also plays a crucial role in holding teachers, schools and the education system accountable for the quality of education and helps teachers and curriculum designers better align their lessons and content with set learning objectives and standards from the NLAF.

The evaluation found that the Catch-Up programme is in line with these fundamental frameworks. It emphasised learner assessments and continuous monitoring, aligning with the frameworks' focus. The baseline evaluation found that the TARL approach of Catch-Up aligned with the commitment of both frameworks to personalise teaching. Additionally, there were linkages between the frameworks and Catch-Up programme's holistic learning approach such as getting caregivers involved in learners' education. Lastly, the Catch-Up programme corresponded with the frameworks' goal of giving teachers the support tools and skills they need to give learners the help they need.

²⁴ Ministry of Education (2013) National Literacy Framework.

²⁵ Ministry of Education (2020) National Numeracy Framework.

²⁶ Ministry of Education (2017) National Learning Assessment Framework.

A historical overview of educational initiatives aimed at addressing the challenge of poor learning outcomes revealed a landscape where various programmes have been introduced over the years. Stakeholders reported a wide range of past programmes, such as New Breakthrough to Literacy (NBTL), Step in To English (SITE), Read on Course (ROC), Primary Reading Programme (PRP), and more. These programmes were all designed to enhance Literacy and Numeracy education in schools. The NBTL primarily targeted early-grade learners, emphasising the improvement of reading and writing skills. It was implemented in primary schools, and employed structured reading materials, teacher training, and classroom support to enhance Literacy. The SITE program focused on English language acquisition for upper primary and lower secondary learners, using language immersion and communicative teaching methods. ROC and PRP were Literacy programs, concentrating on primary school learners and employing a structured approach with levelled reading materials, teacher training, and assessments.

These programmes shared a common goal of improving Literacy, but they differed in their specific focuses, pedagogical approaches, and targeted age groups. The Catch-Up programme, on the other hand, focuses on improving Literacy and Numeracy skills for Grade 3-5 learners using the TaRL approach and local language instruction. Teachers and officials from MoE held differing opinions regarding the past programmes' effectiveness. Some expressed that these initiatives were successful in grouping learners based on their abilities and providing targeted instruction. Conversely, others noted that these programmes lost effectiveness due to various factors, such as teacher attitudes, changes in methodologies, and the transition from teacher-centred to learner-centred approaches.

Yes, it was not so effective if I could say because most of the methodologies we used that time were teacher-centred as compared to the learner-centred approach [in the Catch-Up programme]. That was the challenge; we thought maybe learners could not contribute anything but at that time, it was all about the teacher's impacting knowledge to the learners. - Headteacher, Mwense

The past and current intervention programmes align with the Catch-Up goals of improving Numeracy and Literacy. However, they differ in their approaches. It should be noted that although teachers appreciated the different programmes to improve learning, they expressed concerns regarding the frequent changes in programme approaches. The perceived persistent shifts in educational programmes gave rise to a sense of frustration among teachers. They reported that each new change seemed like "another intervention" added to an already complex landscape. This sentiment was not only rooted in the desire for stability but also in the practical implications of adapting to new methods, materials, and instructional approaches. Teachers indicated that they require time to fully integrate and refine their instructional practices, and frequent changes were felt to disrupt this process. Despite the Catch-up programme being aligned with the goals of past programmes and the National Literacy and Numeracy frameworks, there was the perception among many of the teachers consulted that it is just another programme they must implement rather than viewing it as a supportive remedial initiative.

The Government of Zambia has placed emphasis on foundational learning and the improvement of learning outcomes, especially in early childhood education. This commitment was made evident through the establishment of the Early Childhood Education (ECE) directorate and ECE centres, highlighting the significance of quality education from a young age. These centres have served and continue to serve as a vital component of the ECE policy, designed to offer a robust educational foundation for young learners.

In summary, the evaluation found that the Catch-Up Programme is not only in alignment with previous Numeracy and Literacy interventions and Catch-Up programmes (though the approaches differ), but also in alignment with national policies on Literacy, Numeracy, and early childhood education which reinforces the Government's commitment to strengthen foundational learning.

3.3. Effectiveness

This section highlights the effectiveness of the Catch-Up programme in improving Literacy and Numeracy of learners in Grades 3 to 5. The section details findings on

- The support systems that teachers were using prior to Catch-Up.
- Teaching methods that were being implemented and capacity building that was available to teachers;
- The perspectives of caregivers and learners on learners' Literacy and Numeracy levels prior to Catch-Up;
- The baseline assessment findings;
- Lastly, some anecdotal commentary on the effectiveness of the Catch-Up programme to date given that this is a retrospective baseline evaluation.

Prior to the Catch-Up programme, teachers had some support systems available to them which included Teacher Group Meeting (TGM), Zonal Education Support Team (ZEST), District Education Support Team (DEST) and Special Teachers Unions of Zambia. These support systems played a role in fostering a culture of shared learning and support among teachers. Using these diverse groups, teachers were able to share successes and challenges, as well as tips on lesson delivery.

Yes, we do have, as special teachers of education we have what we call Special Teachers Unions of Zambia where we even have WhatsApp groups and, on that platform, we share a lot of information concerning our special children. So, we share a lot of challenges like what we are going through, the successes and all that, so it is has been really helpful. - Teacher, Chifunabuli

During the FGDs, teachers reported that they typically relied on uniform teaching approaches for all learners, regardless of their individual learning needs. This approach did not address the specific comprehension levels of learners. The Catch-Up programme's emphasis on grouping learners based on their level has shown the potential to improve this teaching practice. Prior to the Catch-Up programme, it was reported that most schools, i.e., government schools, community schools and special schools were implementing a teacher-centred approach. In a teacher-centred approach, the teacher is the primary source of knowledge and information. They are responsible for delivering content, explaining concepts, and guiding learners through the learning process. Learners are expected to passively receive this information, absorbing it through lectures, demonstrations, and readings. The Catch-Up programme encouraged the shift from teacher-centred to learner-centred teaching methods to improve learners' interest, active participation, and a more comprehensive understanding of the subjects. The extent of the change in teaching practices will be assessed at midline and endline.

The challenge was that the learners with diverse challenges were incorporated in the same classrooms with the children without challenges. And paying specific attention to the few learners with those challenges could take us a long time to meet their needs. So that was the challenge of inclusiveness including those learners with problems in the mainstream. Another challenge is that sometimes the teachers would not even pay attention to the learners that have problems. So, in short diagnosing the problem with the children with challenges became a problem for the teachers. So, they could teach the whole class just as if they were teaching the learners that were just ok. - Headteacher, Kawambwa

The teachers indicated that they accessed various training and capacity building activities including the TaRL training delivered by VVOB which focused on Literacy and Numeracy. Records on teacher training showed that 773 teachers were trained across 254 schools at the baseline in Chifunabuli, Kawambwa, Mwense and Nchelenge districts (see Table 5 below).

Table 5: Number of teachers trained (disaggregated by district and gender)

District	Female teachers trained	Male teachers trained	Total teachers trained
Chifunabuli	68	115	183
Kawambwa	105	123	228
Mwense	94	61	155
Nchelenge	79	128	207
Total	346	427	773

These teacher trainings were organised as and when needed by the teachers. While they were thought to enhance teaching methods, all methods taught focused on a uniform approach for all learners. Teachers across the different categories of schools (GRZ, community and special needs) felt that before the Catch-Up programme, the methods that were introduced to them were more teacher-centred, where the teacher was responsible for imparting knowledge, directing lessons, and making instructional decisions, with the learners playing a more passive role. They felt that through the Catch-Up programme, they were introduced to methods that were more focused on learners; the TaRL trainings appeared to provide teachers better clarity on how to tailor instruction to diverse learning styles and cater to the different needs of learners.

Baseline Learner Assessment Findings

The baseline learner assessment was conducted in January 2022 after the Catch-Up programme was rolled out in schools in Chifunabuli, Kawambwa, Mwense and Nchelenge districts. The assessment tools measured learners' Literacy and Numeracy levels against the indicators highlighted in Table 6 below.

Table 6: Assessment indicators and their meanings

	Category	Meaning
Literacy	Beginner	Learner cannot sound out 4 letters correctly
	Letter	Learner can sound out 4 letters correctly
	Word	Learner can read 4 words correctly
	Paragraph	Learner can read a paragraph fluently with less than 4 mistakes
	Story	Learner can read a story fluently with less than 4 mistakes
Numeracy	Beginner	Learner cannot recognise four single digit numbers (1-9)
	1-digit	Learner can recognise four single digit numbers (1-9)
	2-digit	Learner can recognise four 2-digit numbers (10-99)
	3-digit	Learner can recognise four 3-digit numbers (100-999)
	4-digit	Learner can recognise four 4-digit numbers (1000-9999)
	Can subtract	Learner can subtract
	Can add	Learner can add
	Cannot add/subtract	Learner cannot add or subtract
	Can multiply	Learner can multiply
	Can divide	Learner can divide
	Cannot multiply/divide	Learner cannot multiply or divide

At the baseline, a total of 41,280 learners were assessed in preparation for the Catch-Up lessons (See Table 7). The assessment was conducted on a near equivalent number of male and female learners across the four districts (See Table 8).

Table 7: Number of learners assessed at baseline (disaggregated by district and grade level)

District	Number of schools	Grade 3 learners	Grade 4 learners	Grade 5 learners	Total number of learners tested
Chifunabuli	63	3,152	2,650	2,335	8,137
Kawambwa	80	3,227	3,246	2,662	9,135
Mwense	52	3,517	3,336	2,922	9,775
Nchelenge	59	5,128	4,816	4,289	14,233
Total	254	15,024	14,048	12,208	41,280

Table 8: : Number of learners assessed at baseline (disaggregated by district, grade level and gender)

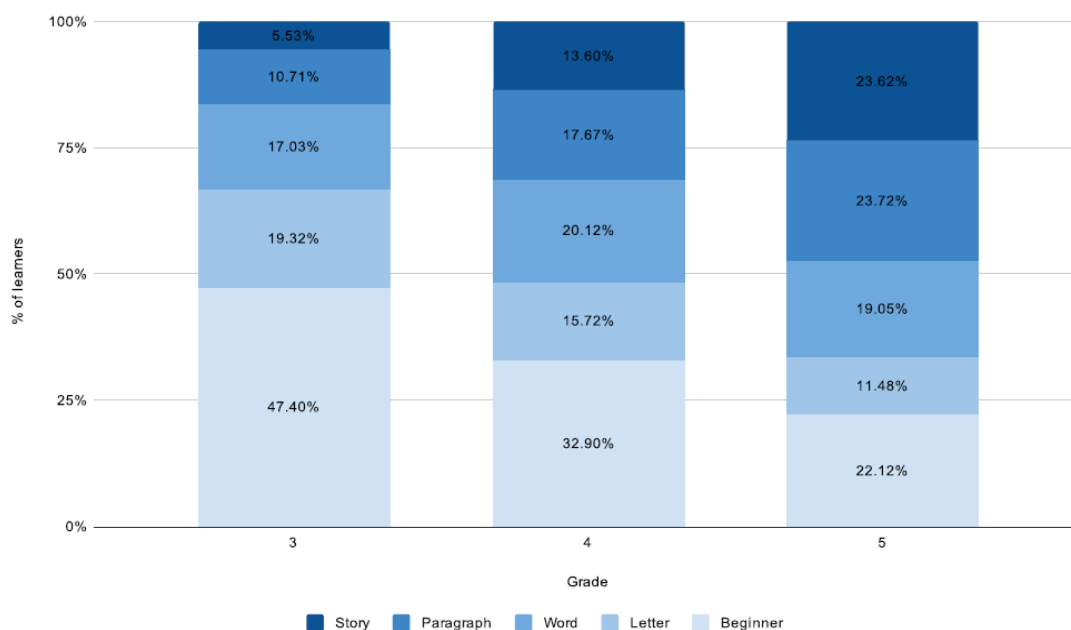
District	No. of Male learners	No. of Female learners	Total number of learners tested
Grade 3			
Chifunabuli	1,611	1,541	3,152
Kawambwa	1,530	1,697	3,227
Mwense	1,752	1,765	3,517
Nchelenge	2,481	2,647	5,128
Sub Total	7,374	7,650	15,024
Grade 4			
Chifunabuli	1,348	1,302	2,650
Kawambwa	1,582	1,664	3,246
Mwense	1,752	1,584	3,336
Nchelenge	2,332	2,484	4,816
Sub Total	7,014	7,034	14,048
Grade 5			
Chifunabuli	1,196	1,139	2,335
Kawambwa	1,298	1,364	2,662
Mwense	1,513	1,409	2,922
Nchelenge	2,136	2,153	4,289
Sub Total	6,143	6,065	12,208
Total	20,531	20,749	41,280

Grade-Level Analysis

According to the National Literacy Framework, key competences for Grade 3 learners include basic skills in reading, while Grade 4 learners are expected to read and comprehend short texts. Grade 5 learners are expected to be able to read short stories²⁷. However, as seen in Figure 3 below, according to learner assessments many learners were at beginner level. There is variation over grades with the highest percentage in Grade 3 and the lowest percentage in Grade 5.

²⁷ Ministry of Education (2013) National Literacy Framework 2013.

Figure 3: Baseline performance in Literacy across Grades 3 to 5

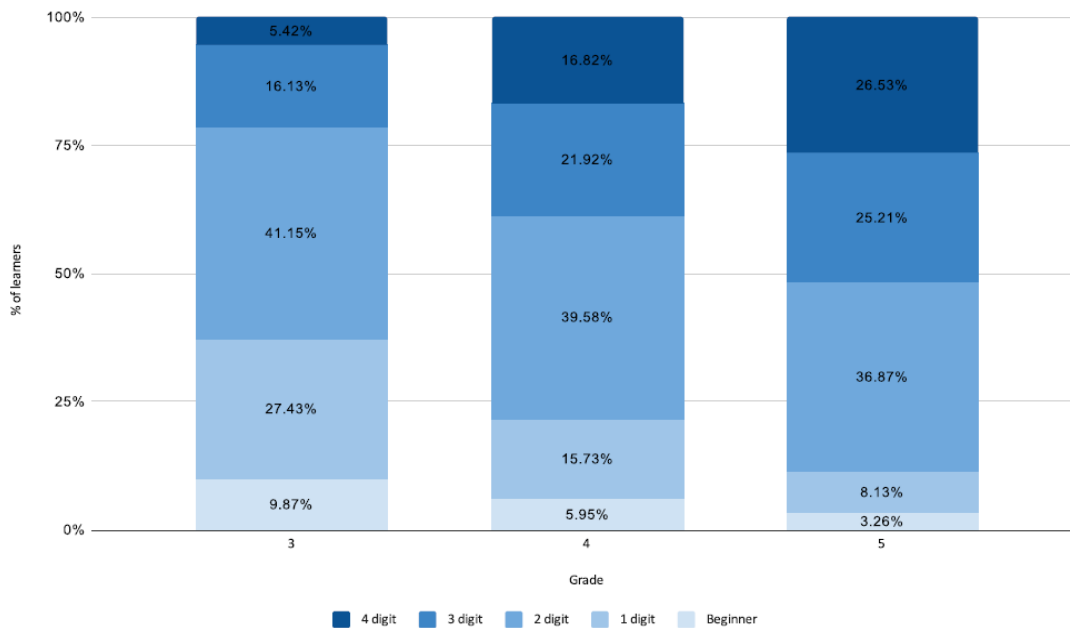


In Grade 3, nearly half of the learners (47.4%) were at beginner level and were not able to identify letters. Approximately 15% of learners in Grade 3 could not read a paragraph or story. This is in line with regional evidence which indicates that 9 in 10 learners in Sub Saharan Africa are unable to read and understand a simple text²⁸. In Grade 4, roughly one-third of learners (32.9%) were at beginner level and only 20.12% were able to recognise words. In Grade 5, approximately a quarter of learners (22.12%) were at beginner level and this group had the highest number of learners who could read paragraphs and stories. This might be an indication of a trend where low-performing learners face challenges and drop out of school in the preceding grades.

As shown in Figure 4 below, the baseline results indicate that a substantial proportion of learners were able to identify 2-digit numbers; 41.5% of 1.5% of Grade 3 learners with this steadily decreasing as the Grades 4 and 5 recognise higher order numbers. This suggested that at the baseline, some learners were not only able to identify numbers but had a basic understanding of place value. That is, they were able to identify the value of every digit in a number depending on its position.

²⁸ UNICEF (n.d) Transforming Education in Africa. <https://www.unicef.org/wca/transforming-education-africa>

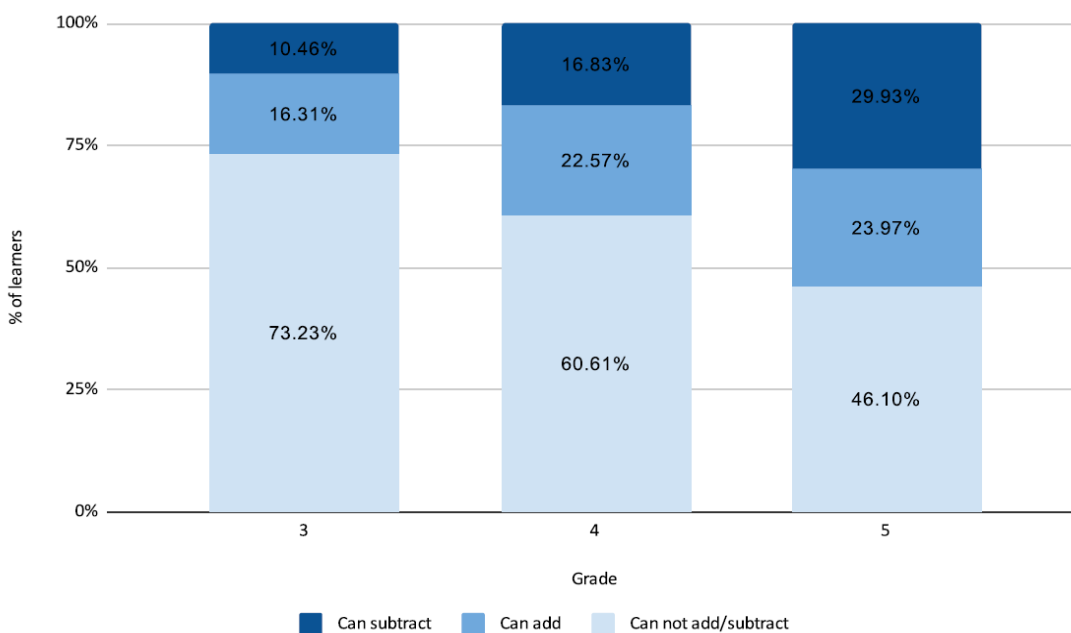
Figure 4: Baseline performance in Number Recognition across Grades 3 to 5



Nearly 10% of Grade 3 learners were unable to identify four 1-digit numbers and so were marked as beginner level. Higher grade levels saw fewer learners at beginner level; with 5.95% in Grade 4 and 3.26% in Grade 5. As the level of complexity increased, fewer Grades 4 and 5 learners were found to be able to read 2, 3, and 4-digit numbers.

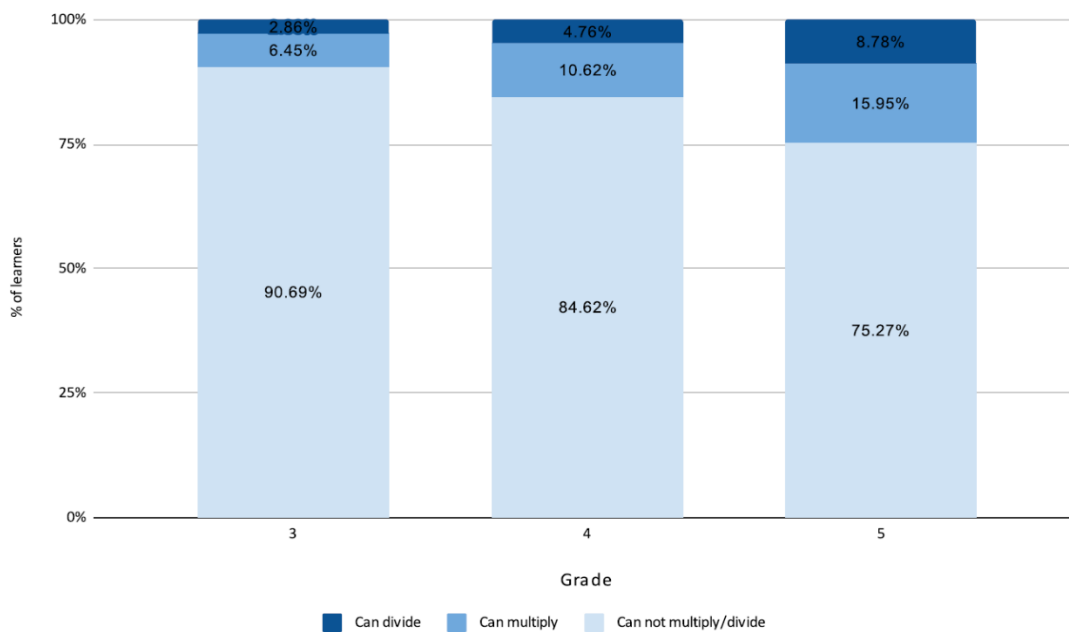
According to the Numeracy assessment guide, when learners score above beginner level, they then progress to basic mathematics operations, starting with addition and subtraction. The analysis that follows highlights the baseline performance of learners in all components of basic operations - addition, subtraction, multiplication and division.

Figure 5: Baseline performance on Addition and Subtraction across Grades 3 to 5



The National Numeracy Framework provides key competencies for Grade 3 learners such as the ability to add and subtract numbers up to 100,000, Figure 5 shows that a large proportion of learners across Grades 3, 4 and 5 struggled with addition and subtraction. At baseline, 73.23% of learners in Grade 3 were not able to add or subtract. However, there was a notable decline in this proportion in Grades 4 and 5, suggesting a progression of improvement in the ability to add and subtract as learners progress through these grade levels. A similar trend was observed in the proportion of learners who could subtract: from 10.46% in Grade 3 to 29.93% in Grade 5.

Figure 6: Baseline Performance Multiplication and Division across Grade 3 to 5



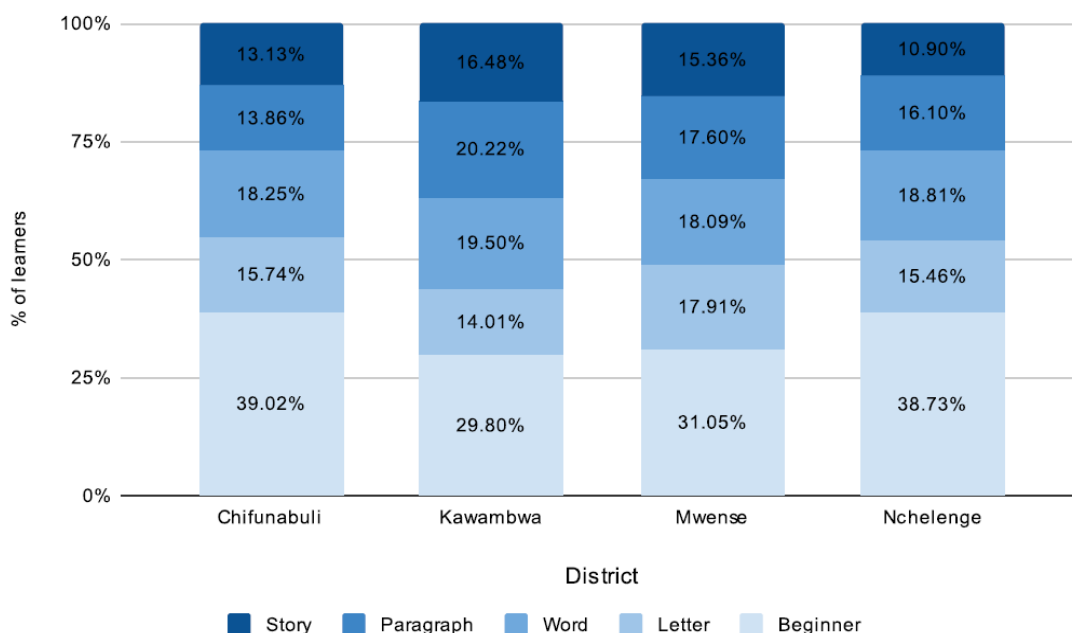
As seen in Figure 6, a substantial proportion of learners across all grades could not multiply or divide - 90.69% of Grade 3, 84.62% of Grade 4, and 75.27% of Grade 5 learners. Across all three grades, performance was lower in division than multiplication. Given that the low performance spans multiple grade levels, there may be a cumulative effect over time. If learners were not mastering multiplication and division skills in earlier grades at the baseline, it may impact their ability to grasp more advanced mathematical concepts as they transition to higher grade levels.

Overall, the baseline assessment results indicated that a large proportion of learners' struggle with basic operations. The assessment results on multiplication and division are in alignment with learner feedback from the FGDs. Many learners across grades identified these as challenging concepts before the Catch-Up programme. The performance of this low base will be reassessed at midline and endline.

District-Level Analysis

At baseline, findings reveal that Chifunabuli and Nchelenge districts had the highest proportion of learners who were at beginner level in Literacy - 39.02% and 38.87% respectively as compared to 31.05% in Mwense and 29.80% in Kawambwa (see Figure 3).

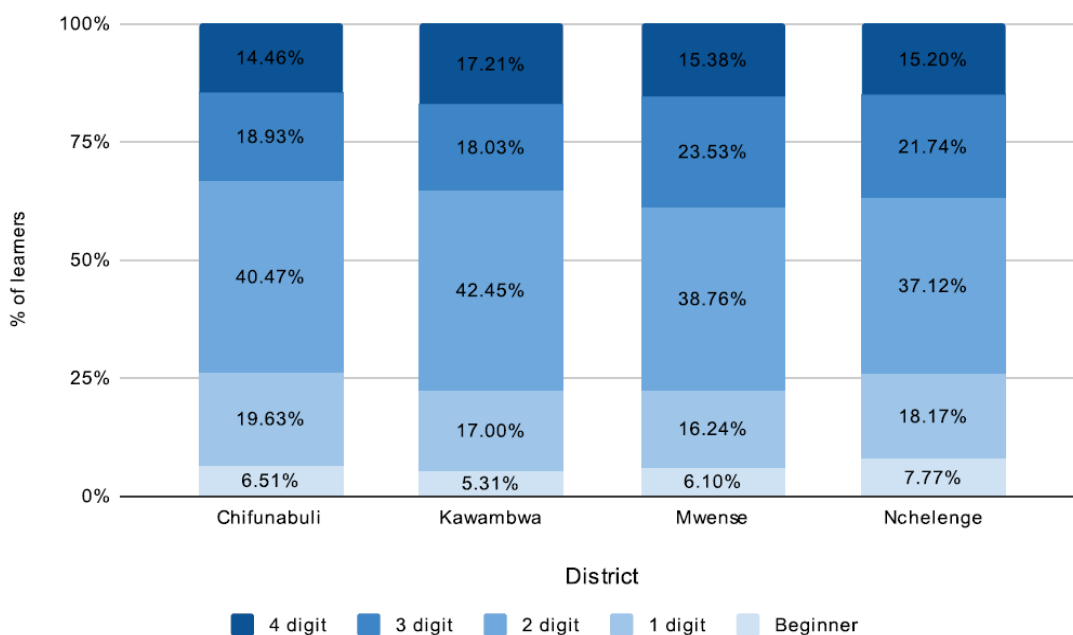
Figure 7: Baseline performance in Literacy across districts



Additionally, schools in Chifunabuli and Nchelenge had a lower proportion of learners who could read paragraphs and stories as compared to Kawambwa and Mwense. Only 13.86% of learners in Chifunabuli and 16.10% of learners in Nchelenge could read paragraphs, compared to 20.22% and 17.60% of learners in Kawambwa and Mwense respectively.

District trends in number recognition largely followed the same trend with schools in Chifunabuli and Nchelenge having the highest proportion of learners performing at a beginner level and the lowest proportion of learners who were able to identify four digit numbers (see Figure 4).

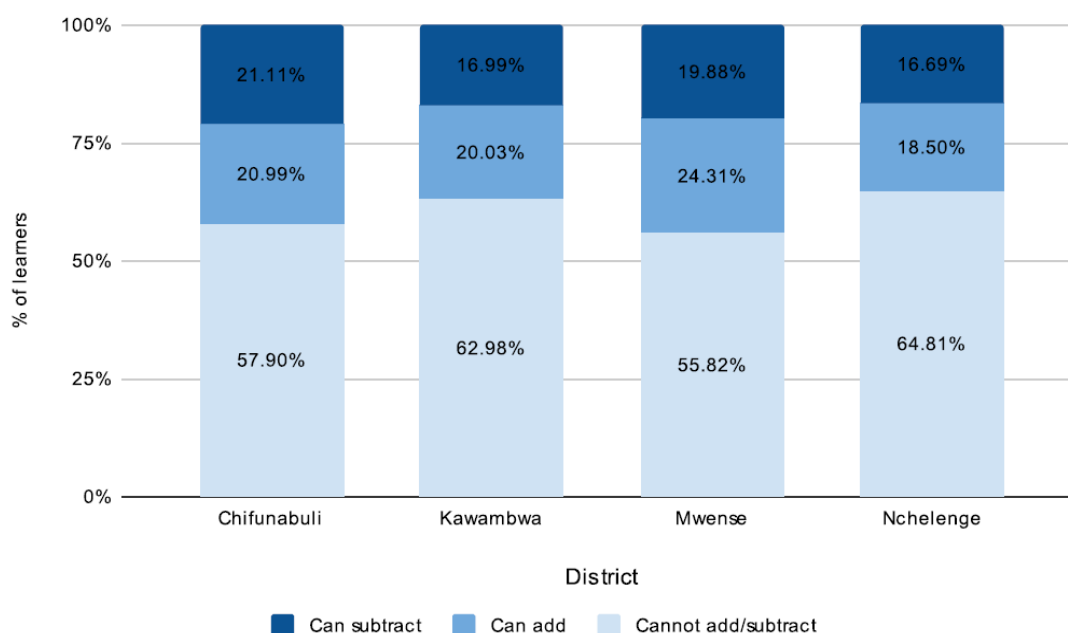
Figure 8: Baseline performance in Number Recognition across districts



In Chifunabuli and Nchelenge districts 6.51% and 7.77% of learners were noted to have been at beginner level and were unable to identify single digit numbers, as compared to 5.31% and 6.10% of learners in Kawambwa and Mwense. Schools in Chifunabuli and Nchelenge also had the lowest proportion of learners who could identify four digit numbers - 14.46% and 15.20% respectively as compared to 17.21% and 15.38% of learners in Kawambwa and Mwense.

The trends in baseline learner performance in the basic numeric operations of addition and subtraction were slightly different, with schools in Kawambwa and Nchelenge having a higher proportion of learners performing at the lowest level of proficiency (learners who could not add or subtract) than schools in Chifunabuli and Mwense.

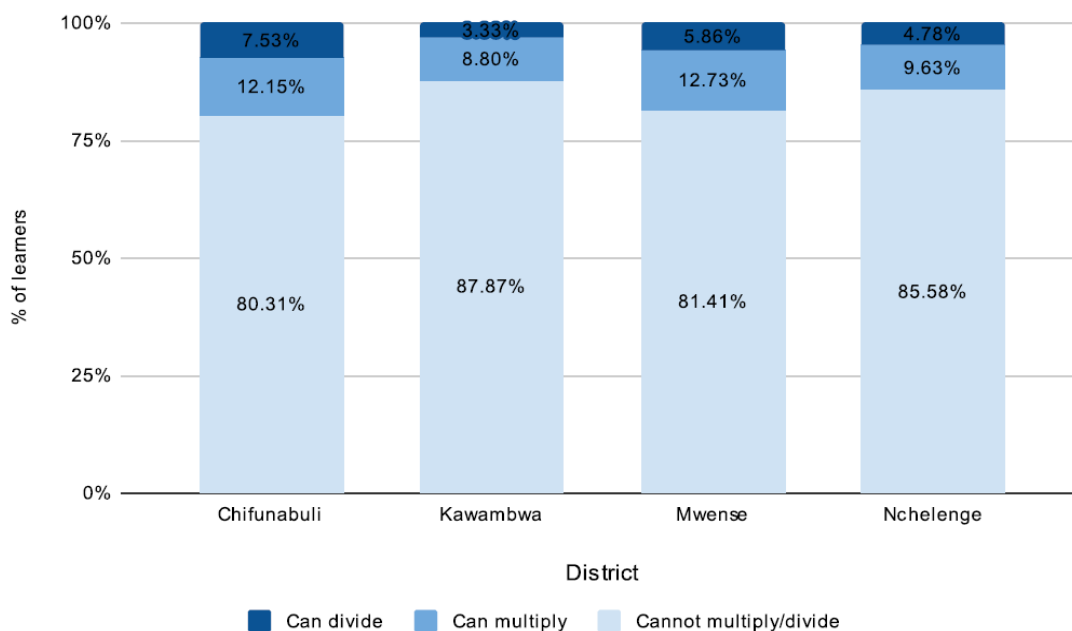
Figure 9: Baseline performance in Addition and Subtraction across districts



Across the four districts, a substantial proportion of grade 3, 4 and 5 learners could not add or subtract; with the highest proportion in Nchelenge (64.81%) and the lowest in Mwense (55.82%). Nchelenge had the lowest proportion of learners who were able to do subtraction (16.69%), followed by Kawambwa (16.99%) while Chifunabuli had the highest proportion of learners who could do subtraction (21.11%), followed by Mwense (19.88%).

Learner performance in multiplication and division followed the same trends as that of learner performance in addition and subtraction, with schools in Kawambwa and Nchelenge having the largest proportion of learners performing at the lowest level of proficiency (could not multiply or divide) and the smallest proportion of learners performing at the highest level of proficiency (learners who could divide).

Figure 10: Baseline performance in Multiplication and Division across districts



Across all districts, the majority of grade 3, 4 and 5 learners could not multiply or divide, with the highest proportion in Kawambwa - 87.87% followed by 85.58%, 81.41% and 80.31% of learners in Nchelenge, Mwense, and Chifunabuli respectively. Only 3.33% of learners in Kawambwa and 4.78% of learners in Nchelenge could do division, followed by 5.86% of learners in Mwense and 7.53% of learners in Chifunabuli.

Additional analysis which compares baseline assessment results across grade levels and districts can be found in Annex II.

Anecdotally and according to caregivers and learners, the Catch-Up programme has had a positive effect on learning outcomes. At baseline level, this could not be verified with quantitative learner data as the baseline only gave us the insights to student's starting ability from which progress will be assessed against. However, this anecdotal reporting presents positive perceptions of the Catch-Up programme among caregivers and learners. According to some of the caregivers, prior to Catch-Up, their children would go to school but were not able to read and do simple calculations.

Caregivers also felt that teachers did not prioritise underperforming learners. Caregivers suggested that some of the teaching methods were ineffective before the implementation of the Catch-Up programme because learners with different learning difficulties were not able to understand lessons that were mostly delivered through teacher notes written on the board. It was also reported that there was no tailored, level-specific teaching and this was coupled with the teacher's attention being split across large class sizes. Some caregivers mentioned that the introduction of the Catch-Up programme made their children feel more motivated to attend school.

The other challenge is that of a class having so many children, say 75 children in a class. The teacher hardly gets to see the pupils and the attention is hard to share. The teacher ends up attending only to those in the front; the ones that are unattended in the back feel left out and lose concentration and get to participate. – Parent/Caregiver, Kawambwa

*My daughter didn't like school that much because she didn't know how to read and was only trying to do her maths but now being on the Catch-up programme has helped so much because she now knows to read and does her maths even way better.
– Parent/Caregiver, Nchelenge*

Anecdotally, the FGDs with learners revealed that the introduction of the Catch-Up programme had improved their reading and writing skills as well as their Numeracy skills.

Catch-up has been difficult at times, but sometimes I see I now read and write better than before. – Learner, Nchelenge

*Before catch-up, some did not know how to read and now they know how to read. Even me, I did not know how to read because we were not learning a lot as we were not having enough time to learn. - learners with special education needs, Kawambwa
I had a challenge in addition. I can now do it well. They would give me numbers to add. I am better now. - Learner, Mwense*

Some of us didn't know how to do numbers because the time that we spent in class learning was short. But now that there is Catch-up, we are now doing well in Numeracy because it is like we are learning more now. - Learners, Kawambwa

Further, feedback from learners revealed that one of the reasons they had difficulties in reading, writing and doing mathematical calculations like divisions, addition and multiplication was because it was difficult to ask the teacher for help during the lessons. Other learners also mentioned that they had trouble concentrating and reading information from the board. Some learners indicated that prior to the Catch-up programme, they could only read in their local language (IciBemba, etc). Some learners now attribute their increased ability to read English to the Catch-Up programme, while others indicated that the Catch-Up specifically helped in improving their performance in such areas as multiplication and division.

“Before Catch-Up came I just knew how to read IciBemba. After Catch-Up I started learning letters, then words and sentences.” - Learner, Kawambwa

The above findings indicate that prior to implementation of the Catch-Up programme, teachers had access to support systems and capacity-building activities, however, these focused on imparting predominantly teacher-centred teaching methods. Evidence of this can be seen in the baseline assessment results as it shows that across all districts, there were very low levels of Literacy and Numeracy. Caregivers and learners were receptive to the Catch-Up programme and were anecdotally reporting that it was having positive effects on learning outcomes. The Catch-Up programme in Luapula was designed to bring about positive

changes in learner outcomes through a shift to learner-centred teaching methods. The programme is set to achieve specific results, and these will be assessed at both midline and endline evaluations. The targeted results are as follows:

15% Improvement in Reading Proficiency: The program aims to increase the percentage of learners who can read a simple paragraph by 15% compared to the baseline. This indicates a focus on enhancing Literacy skills and comprehension among the learners.

15% Improvement in Double Digit Subtraction: Another targeted outcome is a 15% increase in the number of learners who can perform double-digit subtraction compared to the baseline. This emphasises the importance of improving mathematical skills, specifically in subtraction.

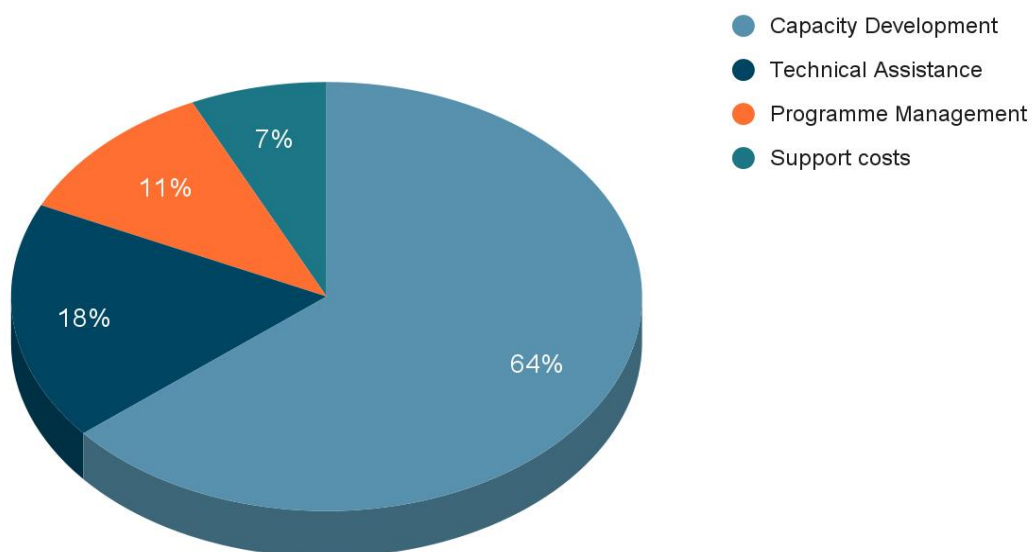
50% Reduction in learners Unable to Recognize Two-Digit Numbers: The program aims to halve the proportion of learners who cannot recognize and/or use two-digit numbers compared to the baseline. This targets a fundamental skill in mathematics and numerical understanding.

The midline and endline evaluation will serve to measure the programme's effectiveness in achieving these specific targets.

3.4. Efficiency

The evaluation team consulted programme documents to identify and highlight the key cost drivers for the Catch-Up programme. The Catch-Up programme budget provided by VVOB indicated that the largest allocation (64%) of the programme budget - 50.253.881 Zambia Kwacha (ZMW) is allocated to the capacity development of key province, district, zonal and school staff so they can deliver Catch-Up teaching and learning methods. This amount included allocations for the development of training materials (ZMW 2.729.509,41); training of MoE Staff (ZMW 10,119,597,06, practice classes (ZMW 19.220,45); and assessment, data aggregation and data use (ZMW 951.528,25). The programme budget also included an 18% allocation to support the MoE in scaling, innovating and testing the programme in the province. This together, with the other programme components, are presented in Figure 4 below.

Figure 11: Budget breakdown for Catch-up programme in Luapula



The implementation of the Catch-Up programme is being rolled out in phases; starting with four districts in 2021, with four additional districts being on-boarded in 2022 and 2023 (see Figure 5). It is expected that by 2024, all 12 districts will have a total of 1896 trained teachers implementing the catch-up programme across 632 schools.

At midline and endline, the evaluation team will assess programme expenditure against the implementation timeline, to see if the budget burn rate aligns to the programme plan and implementation timeline. and where large deviations have occurred, explore the reasons.

3.5. Sustainability

This section explores mechanisms that have been put in place to ensure that the programme remains sustainable beyond the initial funding period.

According to the programme documents, temporary mechanisms have been established to support the sustainability of the Catch-up programme. Funds were allocated in the programme budget to support the MoE in the identification, testing, and scaling up of cost-effective, innovative teacher support systems throughout the programme's 2021–2024 duration. This suggested that the learnings from these activities would enable the MoE to acquire insights and approaches that could be incorporated into the existing government system to enhance the programme's scalability subsequent to its completion of the donor-funding period. These learnings would be unpacked during the course of the midline and endline evaluations. Beyond the budget allocations from the donor funds, there was no indication that there was a comprehensive sustainability plan to ensure that the programme continues when donor funding is exhausted.

Another core element to the sustainability of the programme includes the extent to which the training component is institutionalised prior to the expiration of the initial deadline. This will be assessed at midline and endline. The endline evaluation will also provide insights into the sustainability of the programme, particularly from the first cohort of schools onboarded. These schools were onboarded in 2021 and as such, the endline evaluation will explore the extent to which the programme's activities are still in place and the sustainability of the outcomes from when these schools were onboarded.

3.6. Impact

The Catch-up programme in Luapula was designed to enhance the academic performance of 80,000 learners over a three-year period. The theory of change states that this will improve FLN and broader learning outcomes in the long-run.

International evidence on foundational Literacy and Numeracy suggests that:

- Children who do not master foundational Literacy and Numeracy may struggle with progressing in school²⁹.
- Assessing what children know and monitoring performance at school-level provides comparative data to education systems to better understand learner performance and outcomes³⁰.

²⁹ Heckman, J. (2006), Skill formation and the economics of investing in disadvantaged children, <https://doi.org/10.1126/science.1128898>.

³⁰ Center for Global Development (2018) Bringing Literacy project to scale, has Kenya found a holy grail? <https://www.cgdev.org/blog/bringing-literacy-project-scale-has-kenya-found-holy-grail>

- Improving foundational learning can contribute to a country's sustainable development, gender equality and inclusive growth, national cohesion and ultimately peace and prosperity³¹.

At midline and endline progress that learners have made in foundational Literacy and Numeracy will be reviewed. Considering that changes in learner outcomes only become more evident over an extended timeframe, the evaluation team will conduct an anecdotal assessment at the midline to determine how shifts in Literacy and Numeracy levels are impacting learner outcomes on a broader scale.

³¹ UNICEF (n.d) Commitment to action on foundational learning. <https://www.unicef.org/learning-crisis/commitment-action-foundational-learning#:~:text=Ensuring%20foundational%20learning%20for%20all,%20other%20Sustainable%20Development%20Goals>.

4. CONCLUSION

The baseline evaluation of the Catch-Up programme in Luapula has provided valuable insights into the programme's design.

The Catch-Up programme is relevant to the children, parents and teachers in Luapula. Luapula is one of the most disadvantaged provinces where children experience the least contact hours of learning, have overcrowded classrooms, experienced high dropout rates and have the highest number of children with special needs. The programme's effort in supplementing contact hours in school, providing targeted remedial learning and shifting towards learner-centred teaching approaches meets many of the needs of learners in the province. It is also being well received by key stakeholders - teachers, learners, parents, caregivers and education officials at various levels. Despite Catch-up being designed for the needs of learners, there are still structural barriers to Numeracy and Literacy that this initiative does not address. These include overcrowded classrooms, high pupil to teacher ratios, and children having household responsibilities to fulfil such as fishing.

The baseline evaluation findings indicate that the Catch-Up programme aligns with national frameworks, policies and priorities in Zambia including the National Literacy framework, National Numeracy framework as well as the 2017-2021 Education and Skills Sector Plan (ESSP). The Catch-Up programme aims to enhance Literacy and Numeracy skills of learners in Grade 3 to 5 which is in strong alignment with the objectives of both the Numeracy and Literacy frameworks. The programme aligns with the National Learning Assessment framework through its commitment to monitoring and assessing learners' progress consistently. Regarding the connection between past Numeracy and Literacy interventions and the Catch-Up program, there's alignment in the shared goal of enhancing Literacy and Numeracy skills for young and vulnerable learners. However, the TaRL approach differs from methods used in programs like PRP and ROC. There were some perceptions of the Catch-Up programme as being 'just another intervention programme' with teachers frustrated with the fact that they have to repeatedly adopt new teaching approaches through these time-bound programmes. Overall, the Catch-Up programme has shown early contributions to the government's goals of ensuring that learners receive effective instruction to achieve better performance and improve learning outcomes.

The baseline assessment results revealed that Literacy and Numeracy levels were very low across grade levels in Luapula province. Grade 3 learners had the highest proportion of learners who could not identify a letter or word (47.40%) and also had the highest proportion of learners who could not multiply or divide (90.69%). Also, on average, 17% of learners could read a simple paragraph, 19% of learners could subtract, while 39% of learners could identify 2 digit numbers across grade levels. But anecdotal evidence suggests that the roll out of the Catch-up programme in Luapula has shown early signs of improvement in teaching and learning activities within the province. Parents, caregivers and learners reported improvements in Literacy and Numeracy skills, noting that young children are increasingly becoming more motivated to attend school and have shown some progress in reading, writing and basic mathematical calculations, especially multiplication and division. However, improvement could not be verified as these were baseline assessments and do not show progress over time.

Regarding the efficiency of the programme, the Catch-Up programme's main goal is to increase teachers' capacity and facilitate a paradigm shift in pedagogy through TaRL training. Aligned to this, the majority of the programme's budget goes to capacity development. The capacity development component of the programme took up 64% of the budget including related costs for the training of school staff and MoE officials, development of training materials, roll out of practice sessions, assessments, and data aggregation.

At the baseline, the evaluation team identified some mechanisms that have been established to support the sustainability of the Catch-up programme, however, there are concerns about the sustainability of these mechanisms. Funds in the programme budget were allocated to facilitate the scaling up of cost-effective teacher support systems during the three-year implementation period. While this is expected to provide valuable insights to enable MoE to aid programme scaling after the completion of the donor-funded implementation in 2024, there is no indication that there is a sustainability plan set in place to ensure that the programme continues when donor funding is exhausted. At midline and endline, the evaluation will engage MoE officials at the national and provincial level to identify efforts towards developing a sustainability plan. The evaluation will also assess the extent to which the training component of the programme is institutionalised as this will ensure that the government is able to scale the largest component of the programme.

At impact-level, feedback from learners, teachers, head teachers and parents indicated that the Catch-up programme has the potential to make a positive impact on the educational landscape in Luapula. The external literature aligns to the hypothesis that improvements in Numeracy and Literacy will in turn improve learner outcomes. At midline and endline, the evaluation team will explore and assess the extent to which improvements in Numeracy and Literacy impacts learner outcomes.

5. RECOMMENDATIONS

Based on the findings from the retrospective baseline evaluation, the following initial recommendations have been made. At midline and endline Genesis will look at the implementation of Catch-Up and the progress of learners and this will enable more programme specific recommendations.

School-level recommendations

Data accessibility: The evaluation findings suggest that while teachers have access to learner assessment data during data collection, in the long-term, they do not have access to historical data stored on the portal. Making historical learner performance data accessible to school-level staff would enable teachers to assess progress and better identify and support underperforming learners based on their individual needs. It would enable headteachers to support teachers and hold teachers more accountable.

Addressing Pupil-teacher ratios: With high levels of pupil-teacher ratios in Luapula, it is essential that teachers get support training on how to manage large class sizes to ensure that the Catch-Up programme runs effectively and teachers are supported in their day to day teaching. At the national level, the Ministry of Education should plan for and make fiscal space adjustments in order to facilitate the constructions of more classrooms and recruitment of more teachers where possible.

Community-level recommendations

Community engagement: The Catch-up programme appears to have gained community support as parents and caregivers have anecdotally reported positive changes to their children's Numeracy and Literacy skills in including reading and solving problems in multiplication and division. Sensitization should be done at the school-level to actively engage parents and caregivers on addressing challenges related to learners' participation in income-generating activities, absenteeism, and dropouts.

Management-level recommendations

Develop a sustainability plan: Currently no comprehensive sustainability plan is in place to ensure the continuity of the programme in Luapula beyond its initial implementation phase. Therefore, there is a need for the education officials at the provincial and national level to work together on developing a clear sustainable plan before the endline in order to ensure that any positive impact from implementation is sustained after 2024. These officials should explore and document sustainable funding mechanisms for the Catch-up programme such as allocating a dedicated portion of the education budget or seeking functional partnerships with other organisations.

Institutionalise training component of the programme: The programme budget includes an allocation for scaling, innovations and testing of the programme. One of the potential sustainability challenges is the lack of financial resources for the government to scale and maintain the programme across the province. To address this, efforts to institutionalise the training component of the programme should be prioritised and possibly be incorporated into the trainings provided in the Colleges of Education

ANNEX I: EVALUATION FRAMEWORK

Evaluation Criteria	Key Question	Sub-Question	Evaluation Stage	Data Sources	Respondent category
Relevance	To what extent, the Catch-Up programme is relevant in enhancing children's learning?	What were the challenges around learning in your school/class before the implementation of the Catch-Up programme? Is the Catch-Up programme addressing those challenges? If so, why?	<ul style="list-style-type: none"> • Baseline • Midline • Endline 	<ul style="list-style-type: none"> • KIIs • FGDs • Desk research 	<ul style="list-style-type: none"> • Teachers • Head teachers • learners • Parents • MoE - HQ, PEO, DRCC, DEBS, EO-TED • VVOB
		To what extent is the programme responsive to the needs and priorities of teachers and learners of different ages, gender and grade level?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIIs • FGDs • Observations 	<ul style="list-style-type: none"> • Teachers • Head teachers • learners • MoE - HQ, PEO, DRCC, DEBS, EO-TED. • VVOB
		Which aspects of the Catch-Up programme are most useful in enhancing children's learning?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIIs • FGDs 	<ul style="list-style-type: none"> • Teachers • Head teachers • learners • MoE - HQ, PEO, DRCC, DEBS, EO-TED. • VVOB
Coherence	To what extent is this programme coherent with MoE's policies, guidelines and interventions in Literacy and Numeracy?	What are the past and current interventions conducted in your district/school to address the challenge of poor learning outcomes?	<ul style="list-style-type: none"> • Baseline • Midline • Endline 	<ul style="list-style-type: none"> • KIIs • Desk research 	<ul style="list-style-type: none"> • Head teachers • MoE - HQ, PEO, DRCC, DEBS
		Is Catch-Up programme in line with and/or adding value to past and current interventions, and if so, in what way?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIIs • Desk research 	<ul style="list-style-type: none"> • Teachers • Head teachers • MoE - HQ, PEO, DRCC,

Evaluation Criteria	Key Question	Sub-Question	Evaluation Stage	Data Sources	Respondent category
					DEBS, EO-TED
		How have the research, remedial guidelines, learning framework informed MoE's policies?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIs 	<ul style="list-style-type: none"> • UNICEF • MoE - HQ
		Is the innovation around monitoring and mentoring in the Catch-Up programme addressing challenges for School-Based Continuous Professional Development (SBCPD) for teachers? If so, why?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIs • FGDs 	<ul style="list-style-type: none"> • Teachers • Head teachers • MoE - PEO, DRCC, DEBS, EO-TED
Effectiveness	To what extent is the Catch-Up programme effective in delivering equitable learning opportunities especially for disadvantaged learners?	How has Catch-Up influenced teachers' teaching methods? How effective are the materials? How effective was the training?	<ul style="list-style-type: none"> • Baseline • Midline • Endline 	<ul style="list-style-type: none"> • KIs • FGDs • Class Observations 	<ul style="list-style-type: none"> • Teachers • Headteachers • MoE - PEO, DRCC, DEBS, EO-TED
		How has Catch-Up influenced teachers' capacity in foundational learning?	<ul style="list-style-type: none"> • Baseline • Midline • Endline 	<ul style="list-style-type: none"> • KIs • FGDs • Class Observations 	<ul style="list-style-type: none"> • Teachers • Headteachers • MoE - HQ, PEO, DRCC, DEBS, EO-TED
	To what extent is the use of innovation effective to the mentoring and monitoring of teachers in a difficult context considering aspects of teacher motivation and continuous professional growth of the teachers?	How are teachers utilising the innovations for monitoring and mentoring, and what are their perceptions? (WhatsApp, SMART Zambia) How have these approaches influenced their capacity to teach?	<ul style="list-style-type: none"> • Baseline • Midline • Endline 	<ul style="list-style-type: none"> • KIs • FGDs 	<ul style="list-style-type: none"> • Teachers • Headteachers • MoE - DRCC/ DEBS, EO-TED • VVOB
		How are learners responding to the Catch-Up classes and assessments?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIs • FGDs 	<ul style="list-style-type: none"> • Teachers • Headteachers • learners
		What factors are influencing learners' engagement and	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIs • FGDs 	<ul style="list-style-type: none"> • Teachers • Headteachers

Evaluation Criteria	Key Question	Sub-Question	Evaluation Stage	Data Sources	Respondent category
	What are the major factors influencing the achievement or non-achievement of the results? How is Catch-Up influencing the enabling environment for foundational learning?	performance in Catch-Up?			<ul style="list-style-type: none"> learners
		How is Catch-Up influencing the provincial strategy?	<ul style="list-style-type: none"> Midline Endline 	<ul style="list-style-type: none"> KIIs 	<ul style="list-style-type: none"> MoE - PEO
		How is Catch-Up influencing the MOE's policies and systems for foundational learning?	<ul style="list-style-type: none"> Midline Endline 	<ul style="list-style-type: none"> KIIs 	<ul style="list-style-type: none"> MoE - HQ, PEO
		How has Catch-Up changed parents' perceptions around foundational learning?	<ul style="list-style-type: none"> Baseline Midline Endline 	<ul style="list-style-type: none"> FGDs 	<ul style="list-style-type: none"> Parents
Efficiency	To what extent is the Catch-Up programme efficient in delivering equitable learning opportunities to all learners considering aspects of cost and timeliness?	How were costs and time allocated to prepare and implement the Catch-Up classes and administer the tests?	<ul style="list-style-type: none"> Midline Endline 	<ul style="list-style-type: none"> KIIs Monitoring reports 	<ul style="list-style-type: none"> Headteachers UNICEF VVOB
		How efficient is the innovation around monitoring and mentoring?	<ul style="list-style-type: none"> Midline Endline 	<ul style="list-style-type: none"> KIIs Monitoring reports 	<ul style="list-style-type: none"> Teachers Headteachers MoE - PEO, DRCC, DEBS
Impact	To what extent did the Catch-Up methodology and teacher mentoring and support contribute to improved Literacy and Numeracy outcomes among learners in Luapula province?	How have learners' Literacy and Numeracy outcomes changed? What factors have contributed to this change?	<ul style="list-style-type: none"> Baseline Midline Endline 	<ul style="list-style-type: none"> KIIs FGDs Learning Assessment Data 	<ul style="list-style-type: none"> learners Teachers Headteachers Parents MoE- DEBS, DRCC, EO-TED VVOB
		What were the positive and negative intended/unintended results of the Catch-Up lessons and teacher SBCPD interventions/teacher motivation?	<ul style="list-style-type: none"> Midline Endline 	<ul style="list-style-type: none"> KIIs FGDs Learning Assessment Data 	<ul style="list-style-type: none"> Teachers Headteachers MoE- DEBS, DRCC, EO-TED

Evaluation Criteria	Key Question	Sub-Question	Evaluation Stage	Data Sources	Respondent category
Sustainability	What are the key drivers of sustainability for the program?	What aspects of the Catch-Up programme can be sustained and what cannot? Why?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIs • Desk research 	<ul style="list-style-type: none"> • Headteachers • MoE - HQ, PEO, DEBS, DRCC • VVOB/ UNICEF
		What are the risks to the programme's sustainability?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIs • Desk research 	<ul style="list-style-type: none"> • Headteachers • MoE - HQ, PEO, DEBS, DRCC • VVOB • UNICEF
		How is the Catch-up learning assessment data analysed and utilised? How will this be sustained post Catch-Up?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIs • Desk research 	<ul style="list-style-type: none"> • MoE
		How sustainable are the results achieved from the program?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIs • Desk research 	<ul style="list-style-type: none"> • Headteachers • MoE - HQ, PEO, DEBS, DRCC
		To what extent does MoE have the capacity to deliver the programme at a national scale?	<ul style="list-style-type: none"> • Midline • Endline 	<ul style="list-style-type: none"> • KIs • Desk research 	<ul style="list-style-type: none"> • MoE - HQ • UNICEF • VVOB

ANNEX II: BASELINE PERFORMANCE DISAGGREGATED BY GRADE LEVEL AND DISTRICT

Across all four districts, most learners did not have the requisite foundational Literacy and Numeracy skills. In the Literacy assessment, many learners were at beginner level - unable to recognise four single letters. In the Numeracy assessment, most learners could identify 2-digit numbers but struggled to perform basic operations.

Literacy Assessment Findings

In the Literacy assessment across Grade 3 schools, the largest proportion of learners in all districts were at beginner level. Grade 3 learners in Chifunabuli and Nchelenge district had a higher proportion of learners at beginner level (52.86% and 51.33%) compared to 41.46% and 42.25% in Kawambwa and Mwense districts. Chifunabuli and Nchelenge also had fewer learners who were proficient at reading paragraphs and stories than in Kawambwa and Mwense.

Figure 12: Baseline performance of Grade 3 learners in Literacy across the four districts

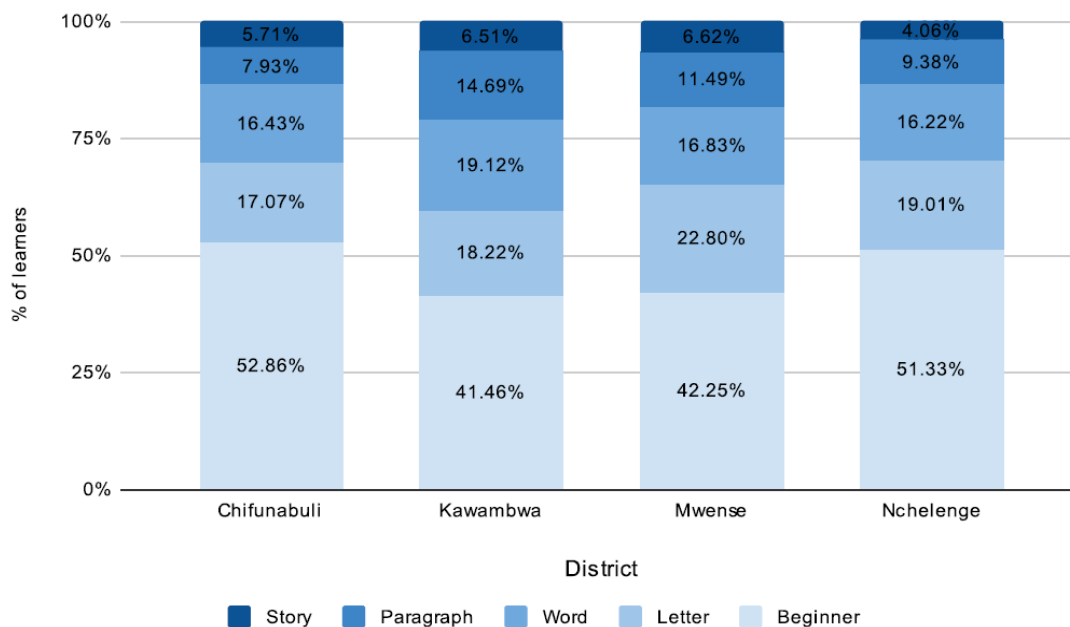
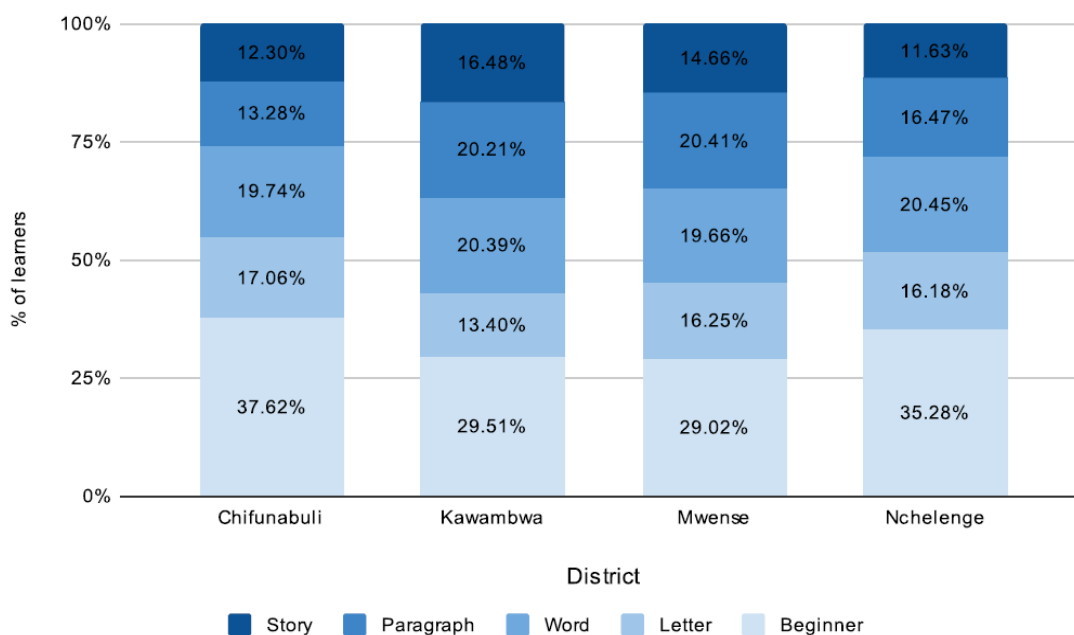


Figure 13 indicates that in Grade 4, learners in Chifunabuli and Nchelenge remain less proficient in Literacy than the other two districts, but the proportion of learners at beginner level were lower than those in Grade 3, with a larger proportion of learners able to read paragraphs and stories.

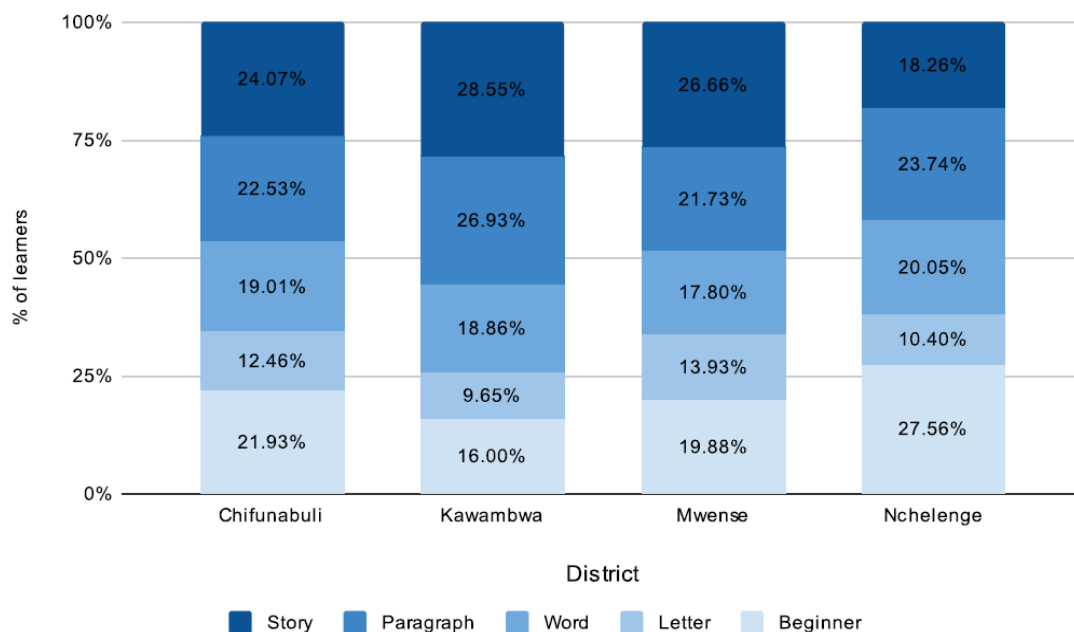
Figure 13: Baseline performance of Grade 4 learners in Literacy across the four districts



On the other hand, Figure 14 shows that in Grade 5, a substantial proportion of learners could read stories and paragraphs. In all districts except Nchelenge, there was a higher proportion of learners who could read either paragraphs or stories than learners who were at beginner level.

Chifunabuli and Nchelenge districts maintained the highest proportion of learners at beginner level -21.93% and 27.56% respectively compared to 16.00% and 19.88% in Kawambwa and Mwense.

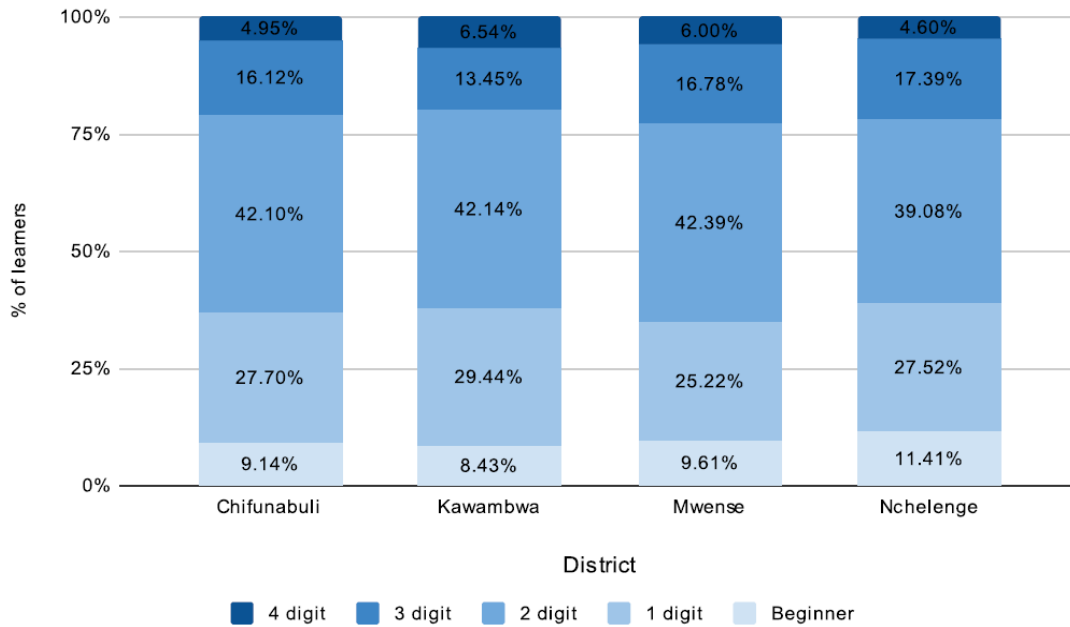
Figure 14: Baseline performance of Grade 5 learners in Literacy across the four districts



Numeracy Assessment Findings: Number operations Sub-Tasks

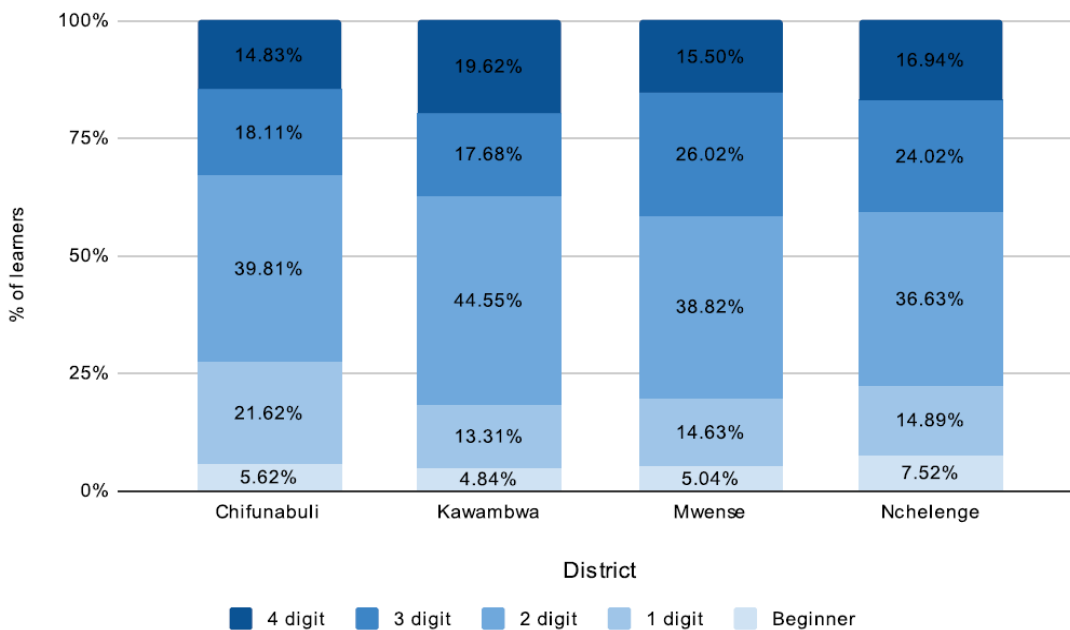
Figure 15 below highlights Nchelenge and Mwense as the districts that had the largest proportion of Grade 3 learners at beginner level - 11.41% and 9.61% respectively. However, it was observed that up to 41% learners across all four districts could identify 2-digit numbers.

Figure 15: Baseline performance of Grade 3 learners in number recognition across the four districts



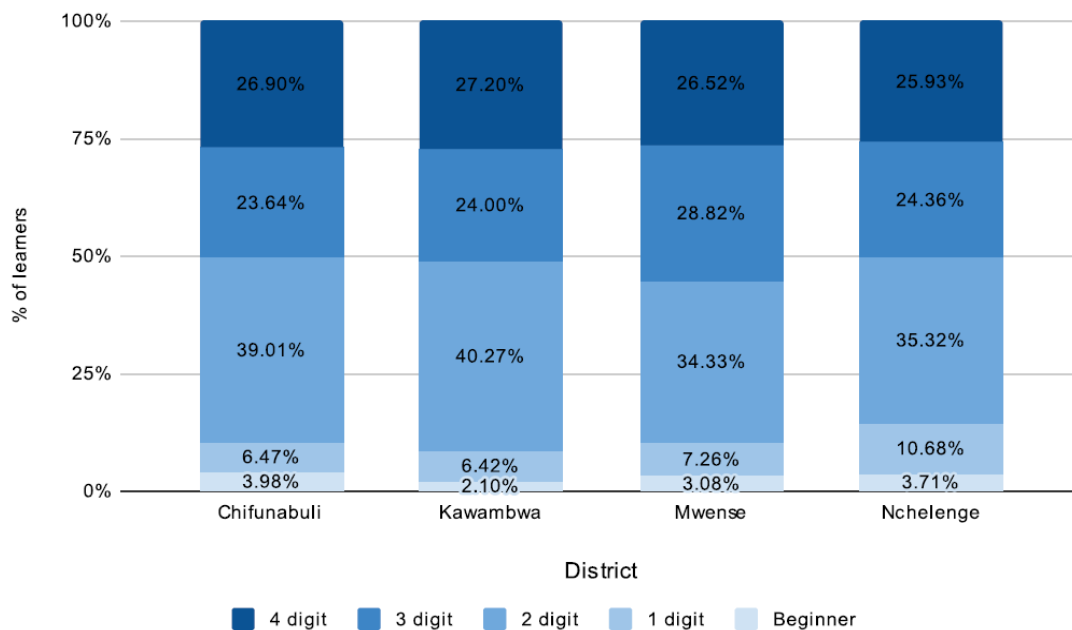
Though Nchelenge and Chifunabuli districts had the highest proportion of Grade 4 learners at Beginner level across all four districts - 7.52% and 5.04% the findings in Figure 16 also indicate that the proportion of learners who could recognise 4-digit numbers substantially higher across all districts, with this proportion at least doubling that of the Grade 3 sample.

Figure 16: Baseline performance of Grade 4 learners in number recognition across the four districts



The Grade 5 learners across the four districts had the lowest proportion of learners at the beginner level and the largest proportion of learners who could identify 4-digits across all districts.

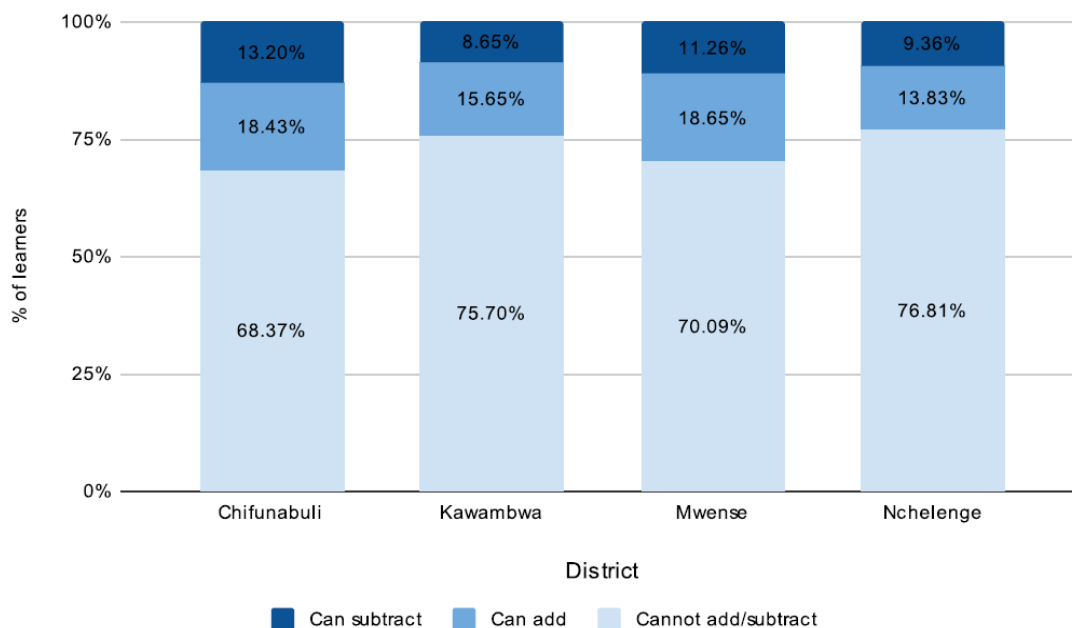
Figure 17: Baseline performance of Grade 5 learners in number recognition across the four districts



Numeracy Assessment Findings: Addition & Subtraction Sub-Tasks

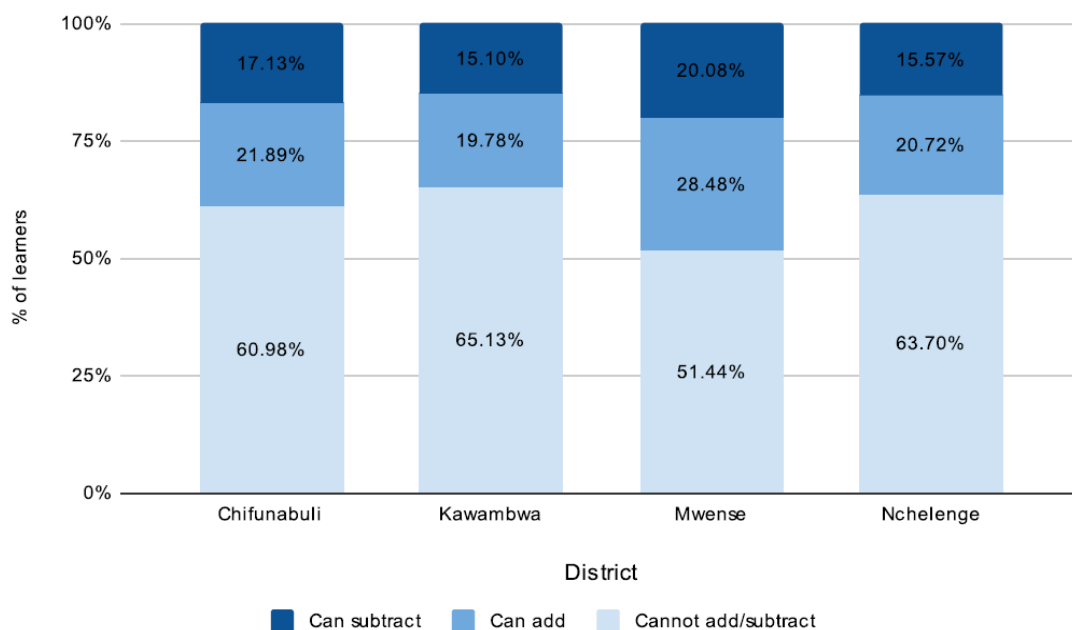
Figure 18 below shows that the majority of Grade 3 learners across all districts could not do addition or subtraction, with learners that fit into this category making up more than two thirds of the Grade 3 learner sample in every district.

Figure 18: Baseline performance of Grade 3 learners on addition and subtraction across the four districts



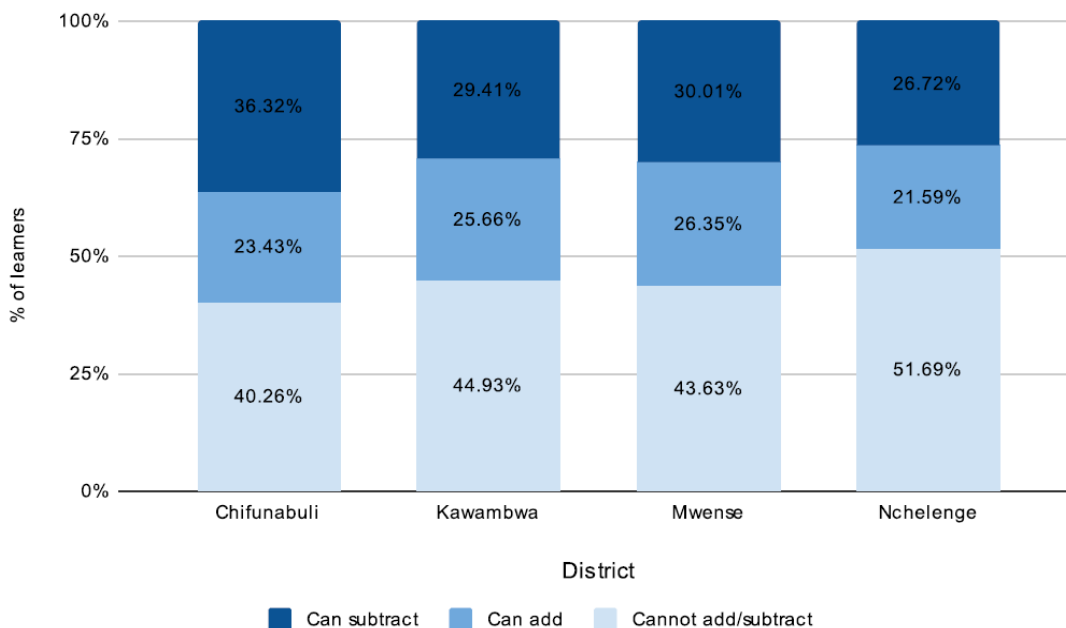
In Grade 4, the majority of learners also could not add or subtract across all districts, but this category made up a smaller proportion of learners in each district compared to Grade 3; while the proportion of Grade 4 learners who could not add or subtract ranged between 51.44% and 65.13%, it ranged between 68.37% and 76.81% for Grade 3 learners (as seen in Figure 19). Mwense district had a substantially lower proportion of learners who could not add or subtract, with this category making up 51.44% of learners in Mwense as compared to between 60.98% and 65.13% in the other three districts.

Figure 19: Baseline performance of Grade 4 learners on addition and subtraction across the four districts



In Grade 5, a significant proportion of learners could do addition and subtraction across all four districts. as opposed to only addition. While Chifunabuli and Mwense had the majority of learners who could subtract (36.32% and 30.01% respectively), Kawambwa and Mwense had the majority of learners who could add. Overall, Nchelenge district had the most significant proportion of learners who could not add or subtract.

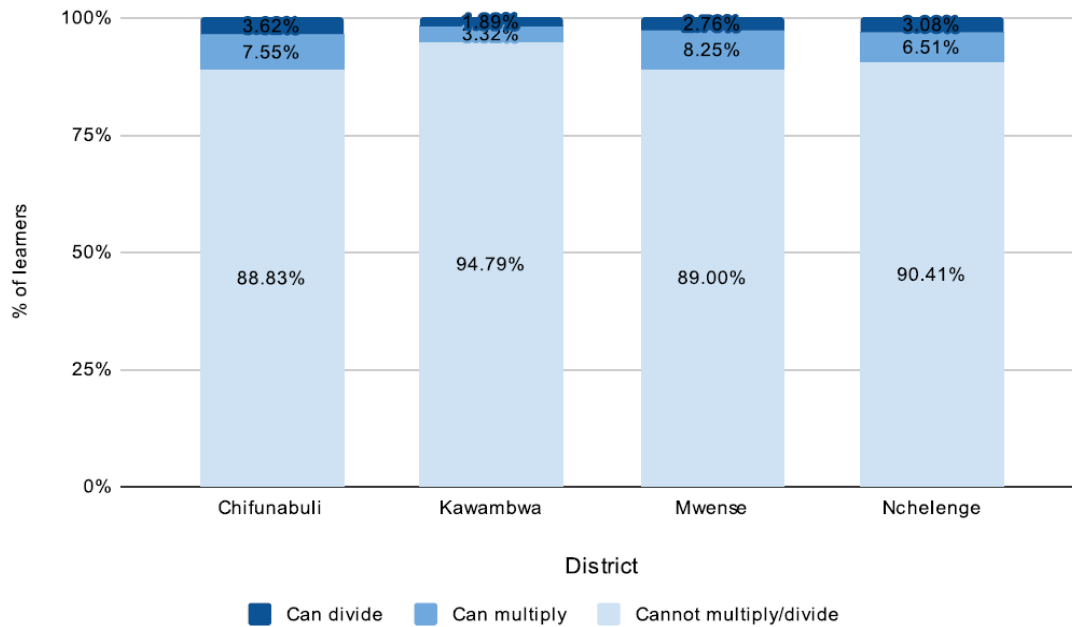
Figure 20: Baseline performance of Grade 5 learners on addition and subtraction across the four districts



Multiplication Sub-Tasks

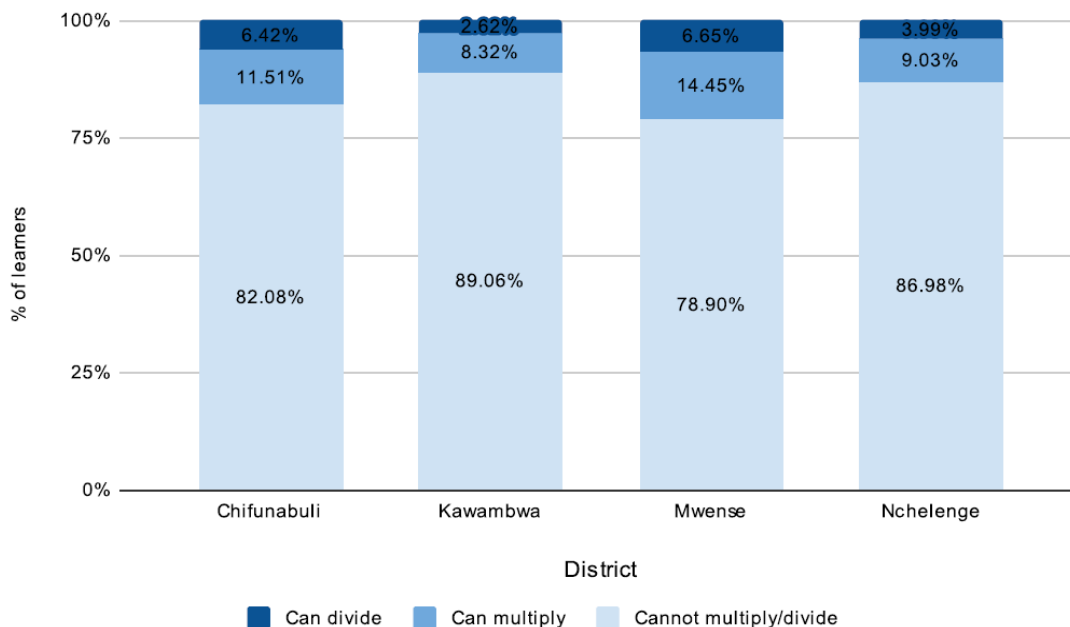
Across the four districts, Kawambwa and Nchelenge had the lowest performing Grade 3 learners - 94.79% and 90.41% could not multiply or divide. Kawambwa also had the smallest proportion of Grade 3 learners who could divide (See Figure 21).

Figure 21: Baseline performance of Grade 3 learners on multiplication and division across the four districts



In Grade 4, the majority of learners could not multiply or divide. The largest proportions of learners making up this category were found in Kawambwa and Nchelenge - 89.06% and 86.98% respectively.

Figure 22: Baseline performance of Grade 4 learners on multiplication and division across the four districts



Even at Grade 5, the majority of learners could not multiply or divide, but with this proportion of learners making up less of the Grade 5 sample than in Grade 4. Chifunabuli district had the largest proportion of learners who could multiply, with roughly a third of learners in Chifunabuli compared to less than a quarter of learners across the other three districts.

Figure 23: Baseline performance of Grade 5 learners on multiplication and division across the four districts

