Draft paper for the Africa Knows! Conference; panel B08

Authors: Winny Cherotich Ngeno, Virginia Ngindiru and Armando Ali

Title: Adaptation of solutions from South Asia: Experiences of improving learning outcomes in Africa

Abstract

Low proficiency levels in literacy and numeracy are a significant occurrence in our classrooms and education systems even as the global focus shifts from access to learning for all. A significant number of learners exit primary education without foundational skills in literacy and numeracy. Globally, the UNESCO Institute for Statistics estimates that 617 million children and adolescents are not achieving minimum proficiency levels in reading and mathematics. This is echoed by evidence from Citizen-led Assessments conducted in the global south, wherein in 2015, only 56% and 46% of grade 3 children could read a grade 2 level Kiswahili text in Tanzania and Kenya respectively. This calls for immediate action to resolve the learning crisis, which, if left unattended, will inhibit not only individual growth but also their contribution to thriving economies. The PAL Network, through its membership, has adapted the Pratham inspired Teaching at the Right Level (TaRL) remedial approach to mediate the learning gaps. This approach i) establishes levels of learning through simple assessments ii) groups learners according to levels rather than age or grade and iii) offers individualized, level-based instruction to hasten acquisition of foundational literacy and numeracy skills. The Asia-Africa partnership has resulted in initiatives in countries such as Kenya and Mozambique, where the adapted approach has shown great potential in helping learners acquire the foundational skills within a short period, usually 30-50 days. Across these countries, more than half of the children moved a level higher in only ten days with more than half reading a story in 30 days. This paper explores the evolution of partnerships from Asia to Africa. We discuss what partnerships mattered most in adapting successful innovations in the various contexts and the lessons learned.

Keywords: Learning outcomes, partnerships, interventions

Biographical information:

Winny Cherotich Ngeno. Winny is responsible for supporting growth of the PAL Network as well as leading the action strand of the network. Winny previously worked with Twaweza East Africa as a Program Officer in Uwezo Kenya, where she was responsible for planning for the national assessments, test development, monitoring of the assessment processes, supporting data entry, analysis and report writing. Winny has previously taught at Muiywek High School and Bomet Teachers Training College. Winny holds a bachelor's degree in Special Needs Education from Kenyatta University and currently pursuing a master's degree in Education Administration from the same university.

Virginia Ngindiru. Virginia leads the ALP team in policy and advocacy monitoring. She is in charge of planning, budget management and program reporting. Previously, she led monitoring, evaluation and learning at Women Educational Researchers of Kenya (WERK). At Voluntary Services Overseas (VSO) Nepal, she mentored, coached and tutored teachers in literacy and numeracy instruction. Virginia has over 10 years' experience in teacher training and holds a bachelor's degree in Early Childhood Education. She is currently pursuing her master's degree in Business Administration (Project Management) at Kenyatta University.

Armando Ali. Armando is a development worker with a wide experience in southern and east Africa. For more than 10 years, was a Senior Advisor and Executive Director to Facilidade, an NGO in Northern Mozambique mobilizing citizens to participate in ensuring the delivery of quality public services - a member of the PAL Network. From 2017 to 2020, coordinates the implementation of Mozambique's citizen-led action – Wiixutta Nithweelaka – a new methodology based on Teaching at the Right Level (TaRL) that allows children to improve their reading and arithmetic competences in 50 days. Previously, Armando was the Pedagogical Director of the Faculty of Education and Communication at Catholic University of Mozambique in Nampula. Armando holds a Masters degree in Peace and Development Work from Linneaus University in Sweden.

Introduction

Despite increased enrollment rates over the past years, learning levels remain low in many developing countries. Globally, the UNESCO Institute for Statistics estimates that 617 million children and adolescents are not achieving minimum proficiency levels in reading and

mathematics (UIS, 2017). In Kenya for instance, the 2015 Uwezo assessment established that only 46% of grade 3 children could read a grade 2 level Kiswahili text (Uwezo, 2016). In Tanzania, the results were not any better, with 56% of grade 3 children being able to read a grade 2 level Kiswahili text (Uwezo, 2017).

Even with impressive progress in improving school management, school infrastructure, free access to the textbooks and reducing the student-teacher ratio, low levels of learning are of great concern in Mozambique as well. Studies carried out by (MINED-INDE, 2016), (SAQMEC, 2007), and (Khan, 2011) in different parts of the country, come to similar conclusions: less than 10% of grade 3 children have basic reading and writing skills in the Portuguese language. Results from the citizen-led assessment carried out by Facilidade through TPC Mozambique program in 2016 concluded that in Nampula province, only 10% of children aged 7-16 years could read a simple grade 2 story and only 20% were able to perform a basic grade 2 addition operation (Facilidade, 2016).

The curriculum expectations at grade 3 level requires the learners to have acquired these foundational skills. The reality however is that many children progress from one grade to another without them. The World Bank refers to this as learning poverty defining it as being unable to read and understand a simple text by age 10 (World Bank, 2020).

The children lagging behind therefore require specific attention to help them improve. This paper examines the adaptation of Pratham's Teaching at the Right Level (TaRL) approach to the Kenyan and Mozambique contexts.

The TaRL Methodology

Developed by Pratham, the TaRL teaching-learning approach was originally designed to help children in grades 3-5 acquire basic reading and math skills (Banerjee, et al., 2016). The TaRL approach emphasizes beginning with the learners at their level, regardless of their age or grade. This is made possible by first conducting an assessment to establish what each child is able to do. Results from the assessment are then used to group leaners according to their learning level, and thereafter, level-based activities are administered. These activities are introduced to the learners in

a fun way, and taking into consideration, their individual needs. The figure below summarizes the approach.

Figure 1: The TaRL process

Learning and sharing has been a key element of growth among the Peoples' Action for Learning (PAL) Network[1] members. Right from the Citizen-Led Assessment (CLA) movement that began in India in 2005 and now being adapted to 12 other network countries, learning on interventions has also followed the same principle. To understand the TaRL approach, PAL held a series of workshops, an introductory workshop in 2017 and a content and material development workshop in 2018, facilitated by Pratham team. From the workshops, members then conducted in-country trainings and adapted the approach to their contexts.

Inspired by TaRL, two members of the PAL Network. Zizi Afrique in Kenya and Facilidade in Mozambique implemented the Accelerated Learning and Wiixutta Nithweelaka programs respectively.

The Accelerated Learning Program in Kenya

---

[1] The PAL Network is a south-south partnership of organizations working across three continents. PAL members conduct citizen-led assessments and actions to improve learning outcomes.

According to the 2019 census, Kenya has a population of 47.6 million and of these 17.8 Million are of school going age (KNBS , 2019). The primary school Gross Enrollment rate in 2018 was found to be 104% while the Net enrolment rate stood at 92.4% in 2018, with a pupil teacher ratio of 42:1 (Ministry of Education, 2018). According to the basic education curriculum framework, the number of years for pre-primary education is 2 years while the number of years for primary education is 6 years (KICD, 2017). Learning levels are low with only 40% of grade 3 children being able to read a grade 3 level English text and 47% of children in the same grade being able to do grade 2 level math (Uwezo, 2016)

The Zizi Afrique Foundation initiated the Accelerated Learning Program (ALP) in Turkana County in 2018. By 2019, ALP had expanded to two more counties, Tana River and Bungoma, bringing the total number of schools reached by the program to 119. Across the three counties, over 6,800 and 7,000 learners have participated in literacy and numeracy camps respectively.

The program utilized the Uwezo literacy and numeracy assessment tools to establish learning levels. After which, the program conducted 30-day learning camps organized in 3 sessions of 10 days each with a 10-day break in between. At the end of every 10 days, the facilitators conducted an assessment to track progress and inform regrouping. The figure below presents a summary of the process.

Figure 2: The ALP learning camp process
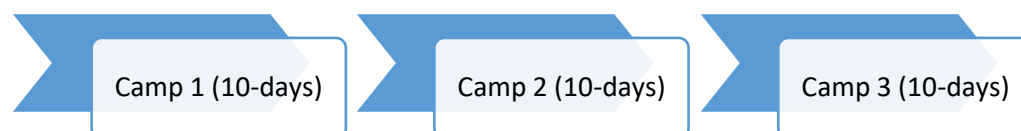
A key adaptation by Zizi Afrique is to include mandatory reading sessions at the beginning of each literacy session for 10 to 15 minutes. Generally, sessions begin with whole class activities, followed by group level activities/individual tasks and concluded at the whole class level.

Wiixuutta Nithweelaka in Mozambique

Mozambique has a population of about 28 million people, of which 52% are women, with 33.5 inhabitants per km2 (INE, 2020). The population is mostly young with 46.6% of people between 0 and 14 years old, 50.1% of the age group 15-64 years. According to the Strategic Plan for

Education 2020 – 2029 (MINEDH[2]: 2020), this age structure reveals the need for significant investment in the first years of schooling (MINEDH, 2020).

The basic education of 9 years of schooling is mandatory. In Primary Education, the subsystem's pupil population doubled between 2004 and 2018, with more than 6.5 million students in 2018 (MINEDH, 2020). The teacher-pupil ratio is 60:1, teacher absenteeism is at 45% and teacher knowledge (Maths, language, pedagogy) is only 29% (UNICEF Mozambique, 2020). According to UNICEF Mozambique, only 5% of children aged 3-5 years have access to quality early learning services. There are 7.2 million children of school going age but only 45.4% of children complete primary education. The report also notes that 1.2 million children are out of school and of those in school; only 5% children in Grade 3 have basic reading competencies.

Facilidade initiated Wiixutta Nithweelaka (meaning learning by playing in the emackua language) to contribute to building the foundations of learning. Facilidade adapted the TaRL approach to improve reading in Portuguese and performance in arithmetic (addition, subtraction, multiplication, and division). Facilidade believes that reading, writing, counting, and calculating are the foundations that will allow children to learn other subjects at school and other life skills. If these skills are not developed in the early grades, these children will hardly be able to learn other subjects at school and in life. The results shared in this paper are based on 2019 experience in which the program was implemented in 6 primary schools, targeting 814 pupils from grades 3-5.

Wiixutta Nithweelaka utilized the TPC Mozambique literacy and numeracy assessment tools to establish learning levels. After which, the program conducted 45-day learning camps organized in 3 sessions of 15 days each. At the end of every 15 days, the facilitators conducted an assessment to track progress and inform regrouping. The figure below presents a summary of the process.

Figure 3: The Wiixutta Nithweelaka learning camp process

Camp 1 (15-days)   Camp 2 (15-days)   Camp 3 (15-days)

---
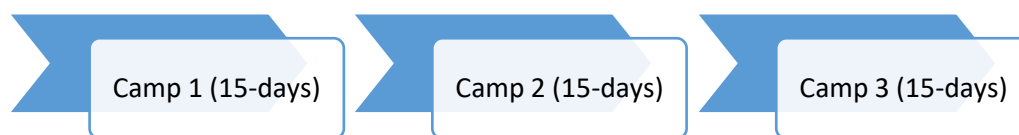
[2] Ministry of Education and Human Development.

Results from the interventions

Over the years, the TaRL approach has proven to be effective in improving basic reading and numeracy competencies. As can be seen in figure 4a, the proportion of children in the Wiixuta Nithwelaka proram who could not even read letters dropped from 42.12% to 11.32%. At the beginning of the project, only 31.17% of pupils could read words but at the end of 50 days, 56.79% of students could already read words. In Kenya, 59% of the children enrolled to the ALP program were able to read a simple Kiswahili story (hadithi) as seen in figure 4b, while those who could not read at all (hawezi) had dropped from 27% to 2% by the end of 30 days.

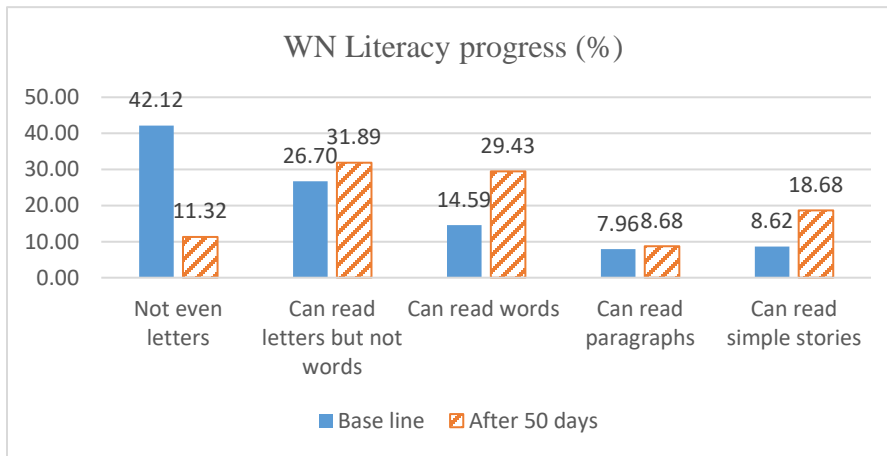Figure 4 a: Wiixutta Nithweelaka (WN) reading levels
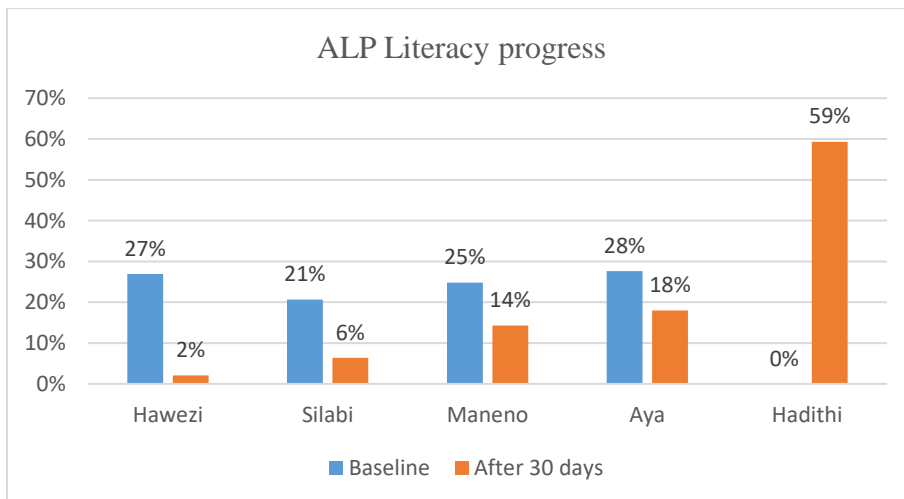

Figure 4 b: ALP reading levels

Figure 5a shows the progress in numeracy in Mozambique, the number of children who could solve multiplication increased from 40.96% to 63.7%, while the number of pupils who could solve division more than doubled after 50 days.

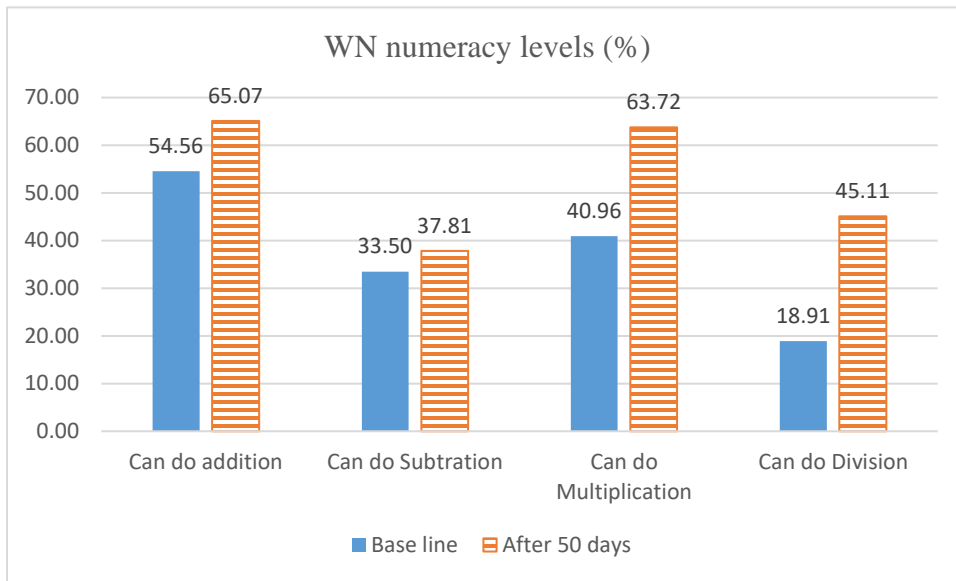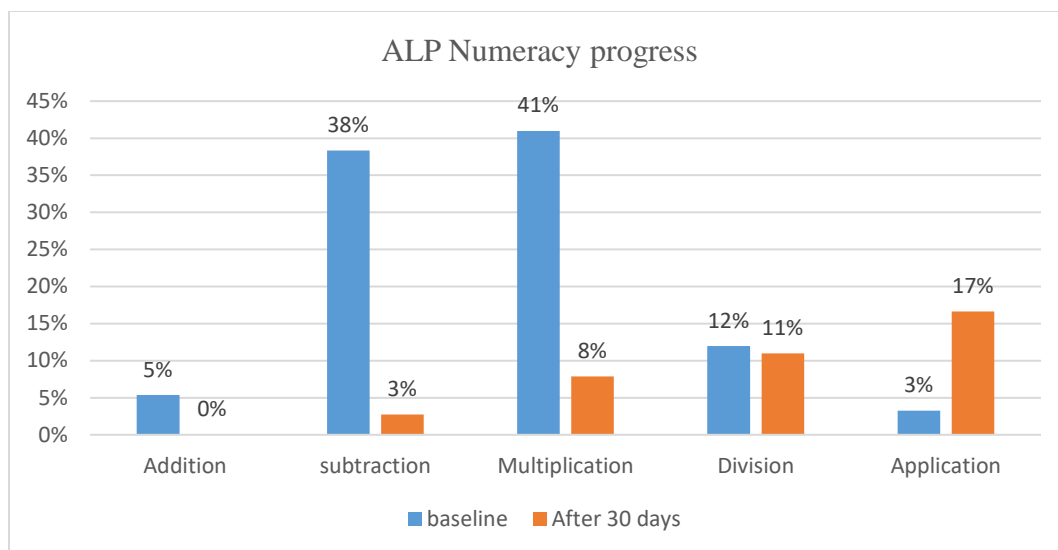Figure 5 a: Wiixutta Nithweelaka (WN) numeracy levels

Figure 5b shows the learners that were struggling with different operations. The number of children struggling to do subtraction reduced from 38% to 3% while those struggling with multiplication reduced from 41% to 8%. Overall, learners who were able to do all operations increased from 3% to 17% by the end of 30 days.

Figure 5 b: ALP numeracy levels

ALP Numeracy progress

Category	baseline	After 30 days
Addition	5%	0%
subtraction	38%	3%
Multiplication	41%	8%
Division	12%	11%
Application	3%	17%

Partnerships that mattered in adapting successful programs

Three main partnerships contributed to the successful adaptation of the TaRL approach to the Kenyan and Mozambican contexts.

1. **Partnership with like-minded civil society organizations:** Pratham has been a learning partner to the PAL Network and over the years, members of the PAL Network have adapted citizen-led assessments as well as citizen-led action programs to their contexts. Pratham's TARL approach was presented as open for contextualization and adaptation. The TARL principles are similar across the countries but the implementation processes are adapted to fit the different local contexts. At the country level, county/local level partners ensure successful implementation of the program.

2. **Partnerships with parents and the school communities:** Based on the reality that the teacher to pupil ratio is too high in Mozambique, Facilidade adopted an approach of public-community partnership and trained teachers and community facilitators on innovative pedagogies for learning and engaged both, to work in schools, to improve reading and basic arithmetic. This made learning a common cause and mobilized school management committees to participate. The ALP program on the other hand had a dedicated parental engagement component through which assessment evidence packaged in the form of a school report card was shared with parents. This gave them a chance to understand first-hand the lack of basic reading and math skills among their children.

3. **Partnerships with government:** The ALP program constituted advisory groups at national and county level to provide technical oversight and guidance on policy related issues for the program to align. These advisory groups included representatives from the Teachers Service Commission, Kenya Institute for Curriculum Development and the National Council for Nomadic Education in Kenya. Joint learning sessions were held with government representatives to share results from implementation.

Lessons from implementation

The application of the TaRL approach has proven to be effective in improving basic reading and numeracy competencies. Teachers involved in the program have recognized the strength of the applied technics, and pedagogical values to build the foundations for learning. However, there are some challenges to be addressed to allow more and more children to benefit from this.

Adoption of these pedagogical practices will only be effective if teacher capacity is improved. One of the factors affecting learning environment is teacher's quality. In Mozambique, Only 3.3% of teachers masters the minimum knowledge in mathematics and 1% in Portuguese language (Bassi, Medina, & Nhampossa, 2019). These gaps can hardly be compensated with teacher training (Bassi, Medina, & Nhampossa, 2019). Therefore, it is important that the approach reaches out to Teacher Training Institutes for teachers to be to be inducted right from the start of training.

Of importance also is the role of parents. We do believe that the quality of service delivery in education depends, on one hand, on the extent to which parents are involved in the school management and their capacity to hold the head teachers and teachers accountable. Problems of teacher absenteeism and management of school resources can be addressed in this process. On the other hand, parents need to support their children to learn at home by providing space and following up on what they learnt in school increase children's awareness of the importance they parents are giving to schooling.

One of the most relevant lessons from this process is the importance of school governance to boost and sustain learning outcomes. Investing only in new teaching-learning methods may not be enough to achieve the expected changes. Although teachers and school administrators are already trained, cases of absenteeism by teachers and students and significant delays in the beginning of

classes prevail. Better and more sustainable results require including a school governance approach (to solve teacher and student absenteeism problems and the future of acquiring specific teaching material for the methodology). Ownership of the project by schools requires time and monitoring between 3 to 5 years. This time is important to set the new practices as a school culture.

Conclusion

Partnerships play a key role in learning and adaptation of solutions. Over the years, Pratham has been open to sharing their innovations right with the citizen-led assessment approach to establish learning outcomes to the TaRL approach to improving learning outcomes. Through learning and adaptation, programs to improve learning outcomes can be successfully implemented.

Communities are also key in supporting learning. By partnering with communities and sharing the evidence, we have succeeded in making the challenge of lack of basic reading skills more visible. We have recently witnessed parents raising funds among themselves to pay volunteers to support learning. Other parents have offered their home spaces and provide mats and chairs for use during sessions. Others have nominated themselves as champions of literacy in their communities.
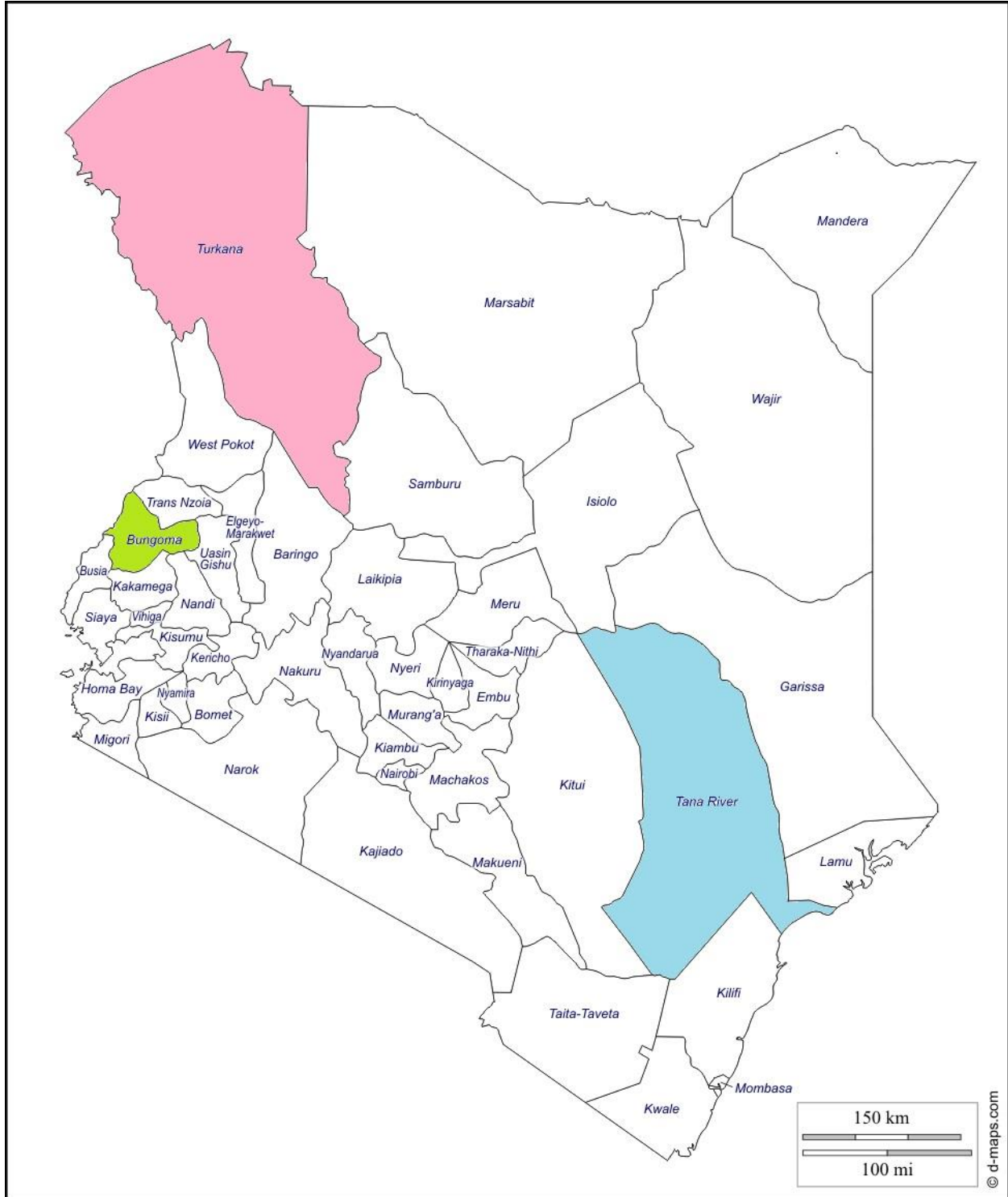
References

Banerjee, A., Banerji, R., Berry, J., Duflo, E., Kannan, H., Mukherji, S., . . . Michael, W. (2016). Mainstreaming an Effective Intervention: Evidence from Randomised Evaluations of 'Teaching at the Right Level' in India. *NBER Working Papers No. 22746. Retrieved from https://www.nber.org/papers/w22746*.

Bassi, M., Medina, O., & Nhampossa, L. (2019). *Education Service Delivery in Mozambique.* The World Bank.

Facilidade. (2016). *Será que as Nossas Crianças Estão a Aprender? Relatório annual sobre a aprendizagem em Moçambique.* Nampula.

INE, I. N. (2020, September 13). *www.ine.gov.mz.* Retrieved from www.ine.gov.mz: http://ine.gov.mz/iv-rgph-2017/mocambique/apresentacao-resultados-do-censo-2017

Khan, F. A. (2011). *Uso Efectivo do Tempo nas Escolas de Cabo Delgado.* Pemba.

KICD. (2017). *Basic Curriculum Framework.* Kenya Institute of Curriculum Development. Retrieved from https://kicd.ac.ke/wp-content/uploads/2017/10/CURRICULUMFRAMEWORK.pdf.

KNBS . (2019). *2019 Kenya Population and Housing Census Volume IV: Distribution of Population by Socio-Economic Characteristics.* Kenya National Bureau of Statistics. Retrieved from https://www.knbs.or.ke/?wpdmpro=2019-kenya-population-and-housing-census-volume-iv-distribution-of-population-by-socio-economic-characteristics.

MINEDH, M. d. (2020). *Plano Estratégico da Educação 2020-2029.* Maputo: Ministerio da Educação e Desevolvimento Humano.

MINED-INDE, I. N. (2016). *Avaliação Nacional de Leitura, Escrita e Numeracia.* Maputo: MINEDH.

Ministry of Education. (2018). *National Education Sector Strategic Plan (2018-2022). .* Retrieved fromhttps://www.globalpartnership.org/sites/default/files/document/file/kenya-nessp-2018-2002.pdf.

SAQMEC. (2007). *Monitoring the Quality of Edution in Schools .*

UIS. (2017). *Fact Sheet No. 46 (UIS/FS/2017/ED/46): More Than One-Half of Children and Adolescents Are Not Learning Worldwide.* UNESCO Institute for Statistics.

UNICEF Mozambique. (2020, September 10). *UNICEF Mozambique*. Retrieved from Basic facts of education in Mozambique: http://www.unicef.org/mozambique/en/education

Uwezo. (2016). *Are Our Children Learning? Uwezo Kenya Sixth Learning Assessment Report.* Nairobi: Twaweza East Africa. Retrieved from https://twaweza.org/uploads/files/UwezoKenya2015ALAReport-FINAL-EN-web.pdf.

Uwezo. (2017). *Are Our Children Learning? Uwezo Tanzania sixth Learning Assessment.* Twaweza East Africa. Retrieved from https://www.twaweza.org/uploads/files/Tanzania%20Report%202017%20Web%20Version.pdf.

Uwezo. (2019). *Are our Children Learning? Uwezo Tanzania Learning Assessment Report.* Dar es Salaam: Twaweza East Africa. Retrieved from https://www.twaweza.org/uploads/files/Tanzania%20Report%20FINAL3%202019%2013-12-2019%20Print%20Ready+zm.pdf.

World Bank. (2020). *Ending Learning Poverty: What will it take?* World Bank. Retrieved from https://openknowledge.worldbank.org/bitstream/handle/10986/32553/142659.pdf?sequence=7.

Annex 1: ALP counties in Kenya

Annex 2: Sample literacy assessment tool

Start here

Paragraph 1

Look at that orange tree.
There is a green nest on it.
A bird lives in the nest.
It sings every morning.

Paragraph 2

Anna has a new car.
It is red in colour.
She drives her car to work.
She keeps the car very clean.

Story

Janet had a birthday party at her home. I went there with my brother. There were other girls and boys. Janet came out to meet us. Her mother was happy to see us. She told all of us to sit down. Some people wearing red hats gave us food.

We ate rice, beans and chapati. They also gave us orange juice to drink. The birthday cake was white and pink. It was very sweet to eat. We sang and danced for two hours. We enjoyed the party very much.

1. Whose birthday party was it?
2. How can we tell that the people were happy?

p	r
f	u
l	t
n	d
a	k

Words

bed	step
test	flag
cat	tap
clan	pig
stand	crop

Annex 3: Sample Numeracy assessment tool

PROGRAMA WIIXUTTA NITHWEELAKA

Nome do Aluno:_____

1. ADIÇÃO

$$+\begin{array}{r}13\\16\\\hline\end{array}$$

$$+\begin{array}{r}26\\18\\\hline\end{array}$$

$$+\begin{array}{r}19\\31\\\hline\end{array}$$

2. SUBTRACÇÃO

$$-\begin{array}{r}26\\12\\\hline\end{array}$$

$$-\begin{array}{r}24\\17\\\hline\end{array}$$

$$-\begin{array}{r}52\\26\\\hline\end{array}$$

3. MULTIPLICAÇÃO

6 X 4 =_____

14 X 2 =_____

26 X 3 =_____

PROGRAMA WIIXUTTA NITHWEELAKA

NÍVEL 1: LEITURA DE NÚMEROS DE 1 DÍGITOS

5	6	1	4	9
8	7	3	2	

NÍVEL 2: LEITURA DE NÚMEROS DE 2 DÍGITOS

14	23	36	41	55
38	70	82	79	60

NÍVEL 3: LEITURA DE NÚMEROS DE 3 DÍGITOS

123	372	613	525	345
444	638	134	732	500