

EXPERIENCE OF KENYA WITH AMPL IMPLEMENTATION

Grade 6 study

Tenth meeting of the Global Alliance to Monitor Learning (GAML)

Paris, 6 - 7 December 2023



1. Background

Articles 43(1) (f), 53 (1) (b), and 55(a) of Chapter 4 of the Constitution of Kenya obligates the government to provide free and compulsory basic education for all children of school going age in Kenya. The Kenya Vision 2030 blueprint also highlights the need to provide globally competitive education for the country's socio-economic and technological development as well as enhanced individual well-being. Sessional Paper No.1 of 2019 aims at reforming education and training to meet these obligations. In addition, the National Education Sector Strategic Plan (NESSP) 2018-2022, provides a framework for delivery of quality and inclusive education, as well as training and research for sustainable development. Kenya is a signatory to various international commitments such as the United Nations' Sustainable Development Goals (SDGs).

The need to conduct the AMPLab study in Kenya was occasioned by the lack of Comparable data to use to report on the SDG4.1.1 indicators. The available data was of a grade level higher than was required at the end of primary and the tests used were not constructed in line with the definition of Minimum Proficiency level of SDG4.1.1. Further, the level descriptors seemed a bit vague regarding reading comprehension or had no equivalent/benchmark on reading comprehension comparable with other regional/international assessments and for reporting on the SDG4.1.1 indicators. Given the importance of international comparison and reporting SDG4.1.1b conducting the AMPL studies was deemed as a stitch in time that we hope will save nine.

2. Conduct of AMPL Study: The Kenyan Experiences and Lessons Learnt

The Kenya National Examinations Council (KNEC) is the AMPLa+b National Centre in Kenya. The AMPLa+b study was conducted in 2023 and targeted learners enrolled at Grade 6. A national representative sample of 245 schools was drawn to participate in the study. The schools were randomly sampled from across the 47 counties of the Republic of Kenya with technical assistance from ACER. The AMPLa+b Reading (English), and Mathematics assessments were administered to a maximum of 25 sampled learners in the participating schools.

The activities were implemented over three main steps from March to June 2023:

2.1.1. Study initiation/Project start-up /operation

Kenya had a challenge that caused delays in the signing of the contract. There was a change in government and cabinet ministers. This was resolved by the seeking of the consensus of the MoE to conduct the study.

What was to happen	What happened	Insights/Improvements/solutions
a) Start the project in January 2023	Started in March 2023 and ran a risk of people pulling in different directions for not understanding their	- Assembling the key team comprising research officers, test developers, ICT officers and have them all attend key technical on-boarding meetings cuts on time taken to debrief them in silos.

What was to happen	What happened	Insights/Improvements/solutions
	specific roles in the study/project.	- Sharing roles and responsibilities of each team and assigning teams to each region of the country helped immensely.
<p>a) Study design:</p> <p>Kenya was to consult with ACER & UIS about the choice of appropriate study design (AMPL-A; AMPL-B or AMPL-A+B)</p>	<p>Kenya had introduced a new education system and no data was available for AMPLa and AMPLb, so we opted for AMPL-A+B to give us the performance of the students on a learning progression scale</p>	<p>- This study design was important in giving the country evidence of where the gaps are for targeted interventions. Country contexts should drive the need for data.</p> <p>- There is need to sensitise / communicate the importance of a learning progression scale to the education stakeholders for appreciation of the results based on the study design chosen.</p>
<p>a) Communication to school coordinators via Microsoft Teams to school coordinators for lists of Classes (LCL)</p> <p>This was to ensure adherence to these technical standards:</p> <p>- The test period MUST fall between 1 April 2023 and 30 June 2023.</p> <p>- The School Sample MUST be finalised AT LEAST 8 weeks before the first day of the test period. This means the sampling forms and the sampling frame SHOULD be submitted AT LEAST 16 weeks before the first day of the test period.</p>	<p>The challenge: Getting an efficient, effective, and secure way of sending/sharing the files with the school's coordinators and equally securely receiving the filled forms from the schools.</p> <p>- Kenya opted to use Secure File Transfer Protocol (SFTP)</p> <p>- Sampled school's IT teacher given a username and password to copy the files from a KNEC SFTP folder to their PCs to fill and finally paste the filled files to a folder provided by KNEC using a simple WinSCP application tool that they downloaded from the NAC portal.</p> <p>- We wrote to school coordinators through their county director's email to link their IT teacher to the Data manager assigned to their region and whose contacts was provided.</p>	<p>a) Permission sought from ACER to use the SFTP instead of Microsoft Teams.</p> <p>b) Embedding the SFTP to the NAC portal worked for the study and will be used moving forward to collect list of Classes from the sampled schools in national assessment studies. Previously, the burden of laid on the data collector sampling the learners on the day of assessment.</p> <p>c) Documenting the new process of using SFTP for the IT teachers ensured they understood the steps to follow and the security aspects at stake and the urgency in the delivery of the task at hand.</p> <p>d) Using IT teachers builds their capacity and ensures the collection of quality data and timely relaying or corrections. Most recent list of classes were shared with KNEC with all data cleaning checks done in 2-3 days.</p> <p>e) Assigning KNEC data administrators regions to manage right from sampling stage ensured schools have contact persons who could handle all data collection issues in real time and with continuity during the study.</p> <p>f) At the country level, the National Centre team was equipped with skills of developing a comprehensive Sampling Frame with the</p>

What was to happen	What happened	Insights/Improvements/solutions
		desired target population. This has contributed to providing a better understanding of how sampling is done for Large Scale Assessments (LSAs).

Adaptation of Tools:

The adaptation guidelines were sufficient. Kenya identified potential a risk of poor performance in the listening comprehension due to the foreign accents used in the audio files. This was resolved by the review of the guidelines on how to carry out the recording of the audio files using Kenyan voice actors. Most Kenyan classrooms are not acoustically treated for listening comprehension administration.

2.1.2. Test Administration preparations:

Kenya adopted a test administration model of dividing sampled schools from the 47 counties into 16 accessible geographical regions. The Data Administrators were assigned 35 or 34 schools across the counties and regions. Each of the 16 Regions were manned by Regional Research Coordinators (RCC) who were centrally trained online and in a face-to-face session on 2nd June 2023. A WhatsApp group was formed for their coordination. Each team trained the Test Administrators (TAs) for the schools within their regions and monitored the actual test administration exercise on 6th and 7th June 2023. Each Regional Research Coordinator formed a second WhatsApp group with the TAs under them. This approach enhanced accountability of the TAs, field checks of the test booklets, giving thorough brief to TAs and supporting them immediately an issue arose, determining any emergent issues that required immediate attention.

What was to happen	What actually happened	Insights/Improvements/solutions
The listening comprehension part of the assessment required the preparation of a smartphone/laptop/tablet and a speaker.	<ul style="list-style-type: none"> -Securing the audio files required the central use of a login portal. -The speaker specifications as recommended were not readily available and way too expensive for schools. - Adaptations made on the Kenya -Test Administrators manual to include the process of accessing the audio files from the KNEC- National Assessment Center portal. 	<p>Embracing flexibility ensured that:</p> <ul style="list-style-type: none"> - The gadgets requirement and operation highly informed the selection of the Test Administrators. - Kenya NC Team embed on the National Assessment Center portal (https://nac1.knec.ac.ke/) how to access the listening comprehension audio file. This was a systemic solution that will ensure better handling of audio files for future listening comprehensions. - 250 alternative portable speakers purchased for use in schools and for future

What was to happen	What actually happened	Insights/Improvements/solutions
		<p>listening comprehension assessments improving the capacity of the NC.</p> <p>- Budgetary allocation consideration for data bundles made for each school to ensure access to the audio files. This could inform future planning of such assessments.</p>
Training of test administrators	The training of TAs was successfully done in all the 16 regions in Kenya on 5/6/2023	- The training of Regional Research Coordinators (RRCs) was done on Friday, June 2 to allow them travel to the regions over the weekend (June 3-4). TAs travelled to the training venue on June 4 . TAs were then be trained on Monday, June 5 . <i>Day 1</i> of Test Administration- June 6 , <i>Day 2</i> of Test Administration- June 7 . Collection and return of materials by RRCs was done between June 8-9 .
Test administration	Challenge accessing only one of the sampled schools in Lamu (security related concerns at the time of data collection).	- Immediate contact made to ACER for a replacement school.

2.1.3. Data processing and data submission:

Data entry and cleaning for the AMPLa+b Grade 6 study in Kenya was conducted from 14th to 28th June 2023. The use of an integrated system (ACER Maple) for sampling and data processing was appreciated by the ICT team in Kenya. It was expected that during the data processing stage 24-28 laptops be used with LAN. Through financial support from the project and with the approval of UIS, the NC purchased 15 laptop Computers for use during the data processing phase. These computers are available for use by the NC whenever needed.

On 7/6/2023 we were happy to report that the test administration exercise at the school level had successfully been concluded, The Regional Research Coordinators (RRCs) started collecting the materials from 6/6/2023 to 7/6/2023. We managed to reach 244 schools (main sample) and 1 replacement school making a total of 245 schools.

The NC tracked student participation rate against the expected/sampled learners as illustrated below:

AMPL OVERALL STUDENT RESPONSE RATES IN KENYA	SCHOOLS
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Present	AB	Present	AB	Sampled	Received	Pending	Total
5104	476	5253	327	5580	245	0	245
91%	9%	94%	6%	100%	100%	0%	100%
Day 1		Day 2					

***AB** - Absent

This served to prove to us that if AMPL tools/test items were to be embedded in the public examinations and administered in the same timelines as public examinations then there would be examples drawn from the Kenyan experiences.

Individual and institutional capacity building

- A. The sampling and data management teams were trained on the use of ACER Maple software for sampling and data processing. These skills will be useful in conducting similar LSAs such as PISA and the National Assessments Kenya is currently conducting.
- B. Capacity development received during item review and adaptation of the achievement tests, questionnaires and other manuals used in research studies enhanced the skills of the NC team and the NC adequately prepared for a national exercise. Kenya would often request for additional training slots from ACER which were graciously granted.
- C. The AMPLa+b project was key in equipping the NC team with skills of assessing Listening Comprehension Skills. The use of portable speakers to facilitate this assessment will be adopted in future assessments of similar nature.

Way forward

The measures taken during the implementation of AMPLab and in strict adherence to the technical standards can be replicated to guarantee timely implementation of AMPL study activities for effective reporting on the SDG 4 indicators, track progress of learning with other countries.

All participating countries have shown their full satisfaction of AMPL implementation so far. The experiences have greatly strengthened National Assessments Systems of participating country. It has enhanced knowledge to do things rightly while conducting national assessment and contextualizing test items, audio clips and other manuals. It has enhanced knowledge on item development / revision, test administration, data analysis and other areas of assessments by working with the technical partners and listening/learning from the country contexts of the participating countries. The AMPL implementation has also enhanced capacity to get comparable data for reporting SDG4.1.1 indicator and preparedness to participate in other international assessments. We need to make these studies regular.