

FORMATIVE STUDY ON THE UTILISATION OF LEARNING ASSESSMENTS IN KENYA

Research Report
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Formative Study on the Utilisation of Past and Present Learning Assessments in Kenya

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List of Acronyms and Abbreviations

ADAPT	Adapting assessment into policy and learning
AfA	Assessment for All
ALiVE	Assessment of Life skills and Values in East Africa
CBC	Competency-Based Curriculum
CEES	College of Education and External Studies
CSOs	Civil Society Organisations
DFID	Department for International Development
EBSCOhost	An online research platform
EGRA	Early Grade Reading Assessment
FCDO	Foreign, Commonwealth & Development Office
FGD	Focus Group Discussion
GC-DWC	Global Centre for the Development of the Whole Child
GESCI	Global e-Schools and Communities Initiative
GPE	Global Partnership for Education
HODs	Head of Departments
ICT	Information Communication Technology
IDRC	International Development Research Centre
ILO	International Labour Organisation
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KEMI	Kenya Education Management Institute
KICD	Kenya Institute of Curriculum Development
KII	Key informant Interview
KISE	Kenya Institute of Special Education
KIX	Knowledge and Innovations Exchange
KNEC	Kenya National Examinations Council
LSCE	Life Skills and Citizenship Education
LSLAs	Large-Scale Learning Assessments
MDGs	Millennium Development Goals
MENA	Middle East and North Africa
MoE	Ministry of Education
NAC	National Assessment Centre
NACOSTI	National Commission for Science Technology and Innovation
OECD	Organisation for Economic Co-operation and Development
PAL	People's Action for Learning
PRIMR	Primary Math and Reading
RTI	Research Triangle Institute
SACMEC	Southern and Eastern Africa Consortium for Monitoring Educational Quality).
SAGAs	Semi-Autonomous Government Agencies
TWGs	Technical Working Groups
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund

UNICEF	The United Nations Children's Fund
USA	United States of America
USAID	United States Agency for International Development

Executive Summary

Background

Global e-Schools and Communities Initiative (GESCI) commissioned Jaslika Consulting to conduct a qualitative study on the utilisation of Learning Assessments in Kenya. The formative study aimed at gathering knowledge and evidence on how the government system has harnessed evidence from large scale Learning Assessments in educational planning and reforms as well as exploring the barriers and enablers for evidence-based decision-making. It also sought to capture key learnings from past experiences and recommend doable actions to support the strengthening of the use of Learning Assessment data in educational planning with a focus on life skills and values.

Using key informant interviews and focus group discussions, the views of 75 participants that included teachers (66.67%), officials from the Ministry of Education and line institutions (18.67%), representatives of civil society organisations, development agencies and independent policy experts (14.66%) were documented, focusing on their awareness, perceptions and utilisation of the findings of Learning Assessments. The emerging issues from an analysis of the primary data collected through the qualitative interviews were triangulated with the findings of a systematic desk review.

The study revealed a general lack of awareness of national Learning Assessments, still less of their findings by study participants who were not directly involved with the assessment processes. There was also widespread ignorance of how the data generated by the assessments may have informed policy development. Not surprisingly, awareness of assessments was strongest with regard to national examinations, but few had interacted with the reports generated by the Kenya National Examinations Council (KNEC) after each examination cycle. The study found that lower primary teachers were more likely than their Upper Primary or Secondary School counterparts to be aware of EGRA and EGMA.

These assessments, measuring literacy and numeracy competency in the early grades were supported by donors (USAID and FCDO). Few classroom teachers, however, were aware of SACMEQ which was administered by the National Assessment Centre operating under the KNEC. However, more informants had heard about the Uwezo findings through conventional media channels especially the radio. Most key informants was not familiar with the relatively new civil society led ALIVE initiative, which is the only large-scale Learning Assessment focusing on measuring selected life skills and values in Kenya, Uganda and Tanzania.

The study found opportunities for the uptake of evidence in policymaking and implementation process but, these opportunities were not being exploited adequately. Though policymakers are cognisant of the importance of evidence in policy formulation, in practice, the policy agenda setting was influenced by other factors including alignment with the Kenyan Constitution, the availability of financial resources, politics of the day, lobbying by organised interest groups and 'politicking'. However, the situational analysis incorporates evidence from multiple sources including Learning Assessments to justify and support the gap(s) addressed by a

particular policy.

Dissemination channels affect evidence uptake because for people to utilise, they must first be aware of and interact with the findings. Engagement with stakeholders using a combination of conventional and social media to disseminate assessment findings, like Uwezo does, may get the attention of policymakers but, may also alienate end users like teachers who feel the messaging is hostile towards them. Though both the KNEC/NAC and CSO websites are functional and assessment reports are uploaded, it provides no guarantee that digital copies will be widely accessible by those living in poor conditions and away from the main urban centres.

The study further highlights the challenges of assessing life skills and values on a large scale because of the complexity of the subject matter on the one hand and critical capacity gaps on the other. Contextualisation of the tests is an expensive and arduous process yet necessary. As the experience of ALIVE demonstrates, it can be done through collaboration with diverse stakeholders and leveraging on partnerships and networks like RELI.

Based on the analysis, the study proposes a raft of recommendations for both the increased uptake of evidence for education policy and practice as well as strengthening assessments focusing on life skills and values. It calls for making judicious investments by eliminating duplication, customising the packaging of products to suit the context, replicating, adapting and expanding use of good practices in dissemination and feedback processes, developing a culture of feedback to stakeholders participating in the assessments and related research, institutionalising utilisation of assessment results through sector-wide planning, dissemination and feedback loops and harnessing the expertise from Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) and ALIVE to collaborate on mainstreaming life skills and values into school-based assessments.

1.0 Introduction to the Study

1.1 Project Background

“Adapting assessment into policy and learning (ADAPT): Adolescent 21st Century skills in Kenya, Uganda, and Tanzania” is a two-year research initiative by Global e-Schools and Communities Initiative (GESCI), Makerere University’s College of Education and External Studies (CEES) and the University of Notre dame’s Global Centre for the Development of the Whole Child. It aims to promote the acquisition of 21st-century skills for adolescents by strengthening the utilisation of data from Learning Assessments in curriculum design, adaptation and delivery. The project specifically seeks to:

Generate lessons from past and present national and regional Learning Assessments and initiatives to enhance national data-driven decision-making.

Build capacity of a dynamic learning community to integrate and assess 21st Century skills and support the utilisation of Learning Assessments at the school and sub-national (district/county/region) levels.

Mobilise policy uptake on the utilisation of Learning Assessments in the education plans, curriculum frameworks, and teacher development.

The project is funded by the Global Partnership for Education (GPE) and International Development Research Centre (IDRC) under the Knowledge Innovations Exchange (KIX) Programme.

1.2 Study objectives

The project is implemented in line with the three main components as articulated in the KIX impact framework namely knowledge generation, knowledge mobilisation and capacity building. Under the knowledge generation component, the initiative aims to generate usable knowledge on the best ways in which the link between Learning Assessment data and curriculum design, adaptation, and delivery can be strengthened at the national level. It is within this framework that qualitative formative studies were commissioned in Kenya, Tanzania and Uganda. The studies aimed at exploring how past Learning Assessments in each of the countries have been used to affect policy and practice. Specifically, the studies addressed the following questions:

1. What are the lessons about national data-driven decision-making from past and present national and regional Learning Assessments in Kenya?
2. Who are the key actors and networks within the education systems, and how do they work as far as utilisation of Learning Assessments is concerned?
3. What are some of the best practices, successes, challenges, and barriers to the utilisation of Learning Assessments?
4. What are the best ways in which to support policymakers at the national level to integrate the ALiVE Learning Assessment into data-driven decisions to improve curriculum design and delivery?
5. How can we use the learnings from past assessment experiences to establish and strengthen a dynamic learning community in Kenya?

In the final report, questions 4 and 5 were merged into one broader question.

This report presents the findings of the formative study conducted in Kenya. Framed within the qualitative research paradigm, it provides a comprehensive analysis of the key learnings from past experiences and proposes doable recommendations to support the strengthening of the use of Learning Assessment data in educational planning and policy.

2 Study Approach and Methodology

2.0 Introduction

The overall study design and methodology was negotiated and agreed upon by the country-specific research teams to ensure comparability of findings across the three countries. The qualitative research paradigm guided the data collection and analysis process, combining a systematic desk review of literature with empirical primary data as described in the section below.

2.1 Study methodology and process

2.1.1 Desk research

The purpose of the desk review was to undertake a systematic appraisal of relevant literature on the utilisation of Learning Assessments, challenges and opportunities in Kenya and to some extent, in the East African region in the case of regional assessments. A rapid review strategy was utilised comprising the following three steps:

Stage One: Identification of the relevant literature

This was done using key search words like ‘Learning Assessments’; ‘learning outcomes’; ‘educational policy reform/s’; ‘use of evidence for policy decision-making’; ‘Learning Assessment outcomes and influence on teacher/classroom practices’; ‘assessing 21st Century skills’; and ‘impact evaluation in education’. Searches were conducted in databases like EBSCOhost and SCOPUS as well as other credible research output resources like Google Scholar, ERIC and ScienceDirect where full articles could be accessed.

Stage Two: Development and application of an inclusion criteria

A clear criteria helped to refine the search process in terms of geographical coverage (global, regional or national), content typology (Learning Assessment practice and policy, theoretical and conceptual work, contextual issues), and relevance to the formative research questions. The pool of literature identified from Stage One was evaluated and included if it met the criteria set below:

- Any of the currently known Learning Assessments (national, regional and global) (2009-2020).
- Discussed how Learning Assessments inform education policy, practice or reform.
- Specific information on national assessments, testing strategies for learning outcomes (national testing policies or frameworks).
- Information on the historical trends on specific Learning Assessments and examples of how the findings had been adopted or shaped educational reforms, policy and practice in Kenya.
- Case studies of Learning Assessments/measurements and tools, and related elements such as how results were disseminated, any products/outputs developed from assessments.
- Important debates on uptake and adoption of research evidence including Learning Assessments and impact evaluations for policy-making and reforms in general as well as specific to the education sector.
- Theoretical or analytical approaches to utilisation of researcher evidence for influencing policy and practice.

Stage Three: Review and analyses of material in the final pool of selected literature.

Priority was given to peer reviewed journals, books, and conference proceedings, but also included grey literature from credible sources and reports, working papers, blog pieces, government documents and policy briefs, media articles, reviews and analysis of the assessment reports that were pertinent to the subject. Over 30 publications and resources were critically analysed.

2.1.2 Qualitative data collection methods

The desk review also informed the design of the study tools which was done in collaboration with the ADAPT teams across the three countries. The tools formed the basis for collecting primary data using two qualitative research strategies, namely key informant interview (KII) and focus group discussion (FGD). A total of 75 participants representing government, civil society and international organisations were reached using the KIIs and FGDs. Some of the KIIs were conducted online using Google Meet, while all the FGDs were conducted in-person. Table 1 and 2 provide more details on the number of study participants.

Table 1. Study participants by type of interview and sex

Study Participant Category	Female	Male	Total
Key Informant Interviewing	11	14	25
Focus Group Discussion	37	13	50
Total	48	27	75

Purposive sampling was used to select the most relevant key informants from the Ministry of Education (Directorates of Policy and Special Needs Education) and line institutions, which included the Kenyan National Examinations Council (KNEC), Kenya Institute of Curriculum Development (KICD), Kenya Education Management Institute (KEMI), Kenya Institute of Special Education (KISE) and Kenya National Commission for UNESCO. Non-state actors include international agencies (UNICEF), civil society organisations (ALIVE, PAL Network, RTI, USAWA Agenda and ZiziAfrique) and individual experts. A preliminary list of institutions and individuals was generated through brainstorming and consultations with the project team. Snowballing was used to expand the list. The final choice of key informants was guided by one or more of the following criteria:

- Position/ role within the organisation
- Expertise in Learning Assessments, life skills and values or 21st Century skills and/or
- Experience conducting Learning Assessment, life skills and values or 21st Century skills' spaces

We also included primary and secondary school teachers in our sample. Using convenience sampling, we selected schools in Nairobi and Kiambu counties. Ac-

cessibility of the schools and the counties in terms of distance and time were key selection criteria.

Table 2. Study participants by institutional category

Institutional Category	Female	Male	Total
Government/policymakers	5	9	14
International agencies	3	0	3
Civil society organisations	2	3	5
Individual policy experts	1	2	3
Schools	37	13	50
Total	48	27	75

As the above tables indicate, females were in the majority, constituting almost two-thirds (64%) of our sample. The gender disparity in favour of females, evident in our sample of teachers, may be due to the concentration of women teachers in urban and peri-urban areas where our sample schools were drawn from.

Table 3 below shows the number of institutions from which we drew our sample. We have defined the term ‘institution’ here as including directorates within the MoE, SAGAs, devolved units (county and sub-county education offices), schools, multilateral and bilateral agencies, non-profits (national and international). We have excluded the category of independent experts here as they were not affiliated to any specific institution. As the table indicates, 72 of the study participants were drawn from 26 institutions.

Table 3. Number of institutions covered vs planned by category

Institutional Category	Targeted Institutions	Achieved Institutions	Number of participants sampled
Government/SAGAs	14	12	14
International agencies	2	2	3
Civil society organisations	6	5	5
Schools	7	7	50
Total (excluding experts)	29	26	72

2.2 Data analysis

The data generated through the desk review and from the field were analysed using thematic analysis and triangulated. Jointly, they facilitated answering of the key research questions on Learning Assessments and key strategies, drivers and barriers that influence successful uptake of research evidence within the education sector. The issues emerging from the literature review informed the tools development.

2.3 Quality assurance and ethical practices

Steps that guarantee rigour and ethical practice in the data collection process and analysis included:

The KIIs and FGD recordings were transcribed verbatim and the transcripts cleaned and validated by the researchers involved in conducting them before analysis. The transcripts were anonymised by assigning a unique identification number to each transcript before uploading on a Google drive folder accessible only to the core research team.

Informed consent was sought from research participants before conducting and recording all interviews and FGDs.

A research permit was obtained from the National Council of Science, Technology and Innovation (NACOSTI) before the start of the data collection process. NACOSTI is the government institution mandated to regulate the conduct and assure quality of research in Kenya.

The study findings were validated in a physical workshop convened by GESCI in Nairobi. Workshop participants were drawn from the ADAPT Advisory Committee and had representation from two State corporations (KICD, TSC) and selected Civil Society Organisations (Zizi Afrique, USAWA Agenda, Jaslika, GESCI, Educafrica Foundations, Dignitas and the Regional Education Learning Initiative (RELI)).

2.4 Implementation challenges

The data collection process was characterised by delays due to delays in securing authorisation to interview MoE staff in addition to other contextual factors including the long examination periods.

Competing priorities contributing to challenges in securing appointments with key informants included the deployment of officials from the MoE and line institutions in activities such as the monitoring of national examinations, both primary and secondary; and monitoring implementation of government priorities such as the completion of the CBC classrooms. By the time authorisation was obtained it was close to the end of the government financial year, a period when key policy and senior technical officers were engaged in the preparation of the budget documents.

A consequence of the long closure of schools as a mitigation measure at the height of the COVID-19 pandemic was the learning loss experienced by learners. On re-opening, there has been a rush to make up for the lost time. To some extent, the 'hesitancy' by some education institutions to allow external visitors (researchers included) onto school premises may be attributable to this.

There were many, unexpected transfers of staff at various levels of the MoE (national, county and sub-county) that hampered the data collection process. This meant building relationships with key personnel almost from a scratch. For exam-

ple, one contact and potential key informant had been moved thrice in one year. Another contact who would have been instrumental in allowing access to the field did not have their contract renewed. This was an election year in Kenya, some, albeit not all of these sudden transfers and retirement, could have been fall-outs from this.

03: The Learning Assessment Landscape

3.1 Global Perspective and Framing

3.1.1 An overview of Learning Assessments

The implementation of the Millennium Development Goals (MDGs) greatly expanded education coverage and resulted in the re-entry of millions of formerly out-of-school children. This notwithstanding, the mass enrolment did not translate to learning for millions of children globally. UNESCO found that close to 700 million children and adolescents are not achieving the minimum proficiency levels in reading and mathematics despite being in school (PAL Network, 2020).

The problem is more acute in the Global South compared to OECD countries. Consequently, with the shift to the Sustainable Development Goals (SDGs) in 2015, greater attention is now paid to education for sustainable development, quality, equity in learning outcomes, the relevance of the required skills and competencies, and assessment of these competencies (Greiff and Kyllonen, 2016; PAL, 2020; González-Salamanca, Agudelo and Salinas, 2020).¹

In Kenya, life skills education has been on the school curriculum for at least three decades in one form or another. However, assessment of life skills (and values) has remained elusive. With the transition from the 8-4-4 system of education to a Competency-Based Curriculum (CBC), which emphasises formative assessment, there appears to be an opportunity for the development of appropriate tools for measuring learning of life skills and values at scale within the context of the school curriculum. For instance, the multi-country ALIVE initiative is a promising home-based intervention that is currently being rolled out in Kenya, Tanzania and Uganda.

3.1.2 Models of Learning Assessments

The historical development of measurement of learning outcomes is fairly recent and can be traced back to the mid-20th century when developed nations began to demand accountability from their education systems (Kamens and Benavot, 2011; Smith, 2014; Kamens, 2017). The exponential growth of large scale Learning Assessments in the last decade is the result of concerns by countries to ensure their education remains relevant, globally competitive, and most importantly, that it is responsive to today's challenges (see Smith, 2014; Kamens and Benavot, 2011; Kamens, 2017; UNESCO, 2019; Volante et al., 2020). At the same time, there is a recognition that education needs to address quality and equity in line with the sustainable development agenda (UNESCO, 2019).

In the Global South, the demand for accountability became particularly critical after the introduction of free primary education in many developing countries in the 1990s. The exponential enrolment was not matched with adequate teaching and learning resources, leading to poor quality education and failure to meet the expected learning outcomes (Mugo et al., 2015; Monk, 2020). Consequently, the need to measure what children are learning in school has led to the proliferation of a global testing culture (Smith 2014; Kamens and Benavot, 2011; Kamens, 2017),

¹ See the Global Partnership for Education Report on MDGs

also known as the test-based accountability system (Volante et al., 2020). Underpinning this global assessment trend is an assumption that educator-based accountability testing, whether by the state or citizen-led, puts pressure on school administrators and policymakers to reform the education system (Smith, 2014).

Therefore, if well utilised, findings from such assessments can contribute to important educational reforms by influencing individual teacher behaviour modification, and improvements in system and school-wide instructional practices, which could translate into better student achievements and learning outcomes.

There are three types of Learning Assessments that are generally used in the education system worldwide. These are summarised in Box 1.

- **Diagnostic assessments** identify the students' skills and abilities against basic norms and standards. These are used to identify learning disabilities or other barriers to learning.
- **Formative assessments** provide teachers with feedback on how their students are performing on a regular basis during the school year. Usually, these include in-class examinations, observations, homework or in-class activities.
- **Summative assessments** measure learning at the end of a period of learning (e.g., a school year, at the end of a course) and assess against the learning expectations from the curriculum. International and national assessments are usually summative assessments.

Box 1. Types of Learning Assessments

Source: *Learning Assessments. DEVCO B4 Education discussion paper. December 2014*

3.1.3 International Large-Scale Learning Assessments

Large-scale Learning Assessments (LSLAs) are standardised tests with a wide coverage, that is, national, regional or cutting across several countries “that provide a snapshot of learning achievement for a given group of learners (based on age or grade) in a given year and in a limited number of domains” (UNESCO, 2019:17).

Globally, they tend to “focus on academic knowledge so that would be in general language and literacy and mathematics, in some cases science” (CSO Representative).

LSLAs constitute a subset of broader Learning Assessment systems that include policies, practices, structures and tools designed to generate data on learning outcomes.

Furthermore, data on outcomes may be collected at individual, institutional or system level to inform and improve performance and actions of teachers, learners, policymakers, or parents (Ibid).

LSLAs are instrumental for education quality monitoring, increasing accountability among various education actors; agenda-setting in education and as a vital tool for analyses of education systems performance (UNESCO, 2019). Volante et

al. (2020) identify three ways in which assessment evidence can be utilised. First, assessment outputs provide useful tools for the development of the education systems' capacity to monitor the quality of education. Secondly, the data collected is useful for development of improvement plans. Thirdly, the evidence enables policymakers to identify inequalities and take corrective actions (Volante et al. 2020). Despite these positive developments, there are growing concerns that the volumes of data that large scale assessments generate do not seem to match with improvements in classroom teaching and learning practices.

Whereas it is argued that some large scale national assessments influence classroom instruction, there are greater concerns on the emergence of “more elaborate testing architectures” for which valuable time is spent testing, which might compromise instructional time (Volante et al., 2020:6). While assessments are important, education managers must strike a balance between the constant need to administer assessments for accountability and ensuring the productive use of school time by teachers and learners. At the same time, given the high cost of developing and administering assessments, it is imperative that large scale test results are usable and translate into significant system-wide and classroom level improvements for better learning outcomes.

The table below summarises some of the major LSLAs at the global level.

Table 3. Global Large Scale Learning Assessments

	Assessment test	Assessment focus	Coverage
1	PISA-Programme for International Student Assessment	Literacy, Numeracy & Science	Global (cross-country in 79 countries by 2018)
2	TIMSS-Trends in International Mathematics and Science Study	Numeracy/Math & Science	Global, covering 64 countries by 2019
3	PASEC-Programme d'analyses des systèmes éducatifs de la CONFEMEN	Cross-Country (French speaking countries in Europe & Global South)	Cross-country in French speaking countries in Europe and the Global South
4	LLECE-Latin American Laboratory for Education Quality Assessment	Reading skills among lower grade children	Cross-country (Latin American Region)
5	PIRLS-Progress in International Reading Literacy Study	Reading skills of lower grade children	Cross-country (Latin American Region)
6	ERCE-Regional Comparative and Explanatory Study	Reading, writing, Science and Math for learners in Grades 3 & 6	Cross-country (over 19 countries in Latin America)

7	EGRA-Early Grade Reading Assessments	Reading Skills	Cross-country (over 70 developing countries)
8	NAEP-National Assessment of Educational Progress	Tests learners in grades 4, 8 and 12 on reading, writing, math, science and other elementary and secondary school subjects	National (USA) - covering all states
9	SEA-PLM-Pacific, the Southeast Asia Primary Learning Metric assessment	Tests Grade 5 learners on Reading, Writing, Math & Global Citizenship Skills.	Cross-country (approximately 11 countries in Asia & Pacific participate)
10	Latin American Laboratory for Education Quality Assessment (LLECE)	Mathematics, science and reading	Cross-country (Latin America)

3.2 Learning Assessments in Kenya - Opportunities and Challenges

In Kenya, the 8-4-4 education system, which is now being phased out, emphasises summative assessments at the end of the primary and secondary cycles of learning in the form of the Kenya Certificate of Primary Education (KCPE) and the Kenya Certificate of Secondary Education (KCSE). There has been a shift in the recently introduced Competency-Based Curriculum (CBC) that gives greater weight to formative assessments throughout the education cycle (60%) than summative assessments at the end of Grade Six (40%). In December 2022, the first cohort of the CBC primary learners will be sitting for their end cycle assessment and subsequently transit to junior secondary school. In schools that they are currently supporting in the country, UNICEF is in the process of assisting the KNEC to digitise the national assessment for Grade Six (Development Agency Representative).

Apart from these, in Kenya there are Learning Assessments that are administered at various educational levels and cycles. The main purpose of these national Learning Assessment, which usually take the form of sample surveys and tests, are to:

- Establish pupils' competency levels in literacy and numeracy;
- Find out the personal, home-based and school-based factors that influence the learning outcomes of pupils/students in literacy and numeracy and
- Determine the combination of inputs that are associated with pupil /student achievement in literacy and numeracy.

Though the tests are administered by different players, most of these are regulated by the Ministry of Education Kenya through the National Assessment Centre (NAC). NAC is a unit within KNEC - the country's mandated national testing and assessment body, which coordinates most of the official evaluations managed by the government. It is, however, not clear whether NAC is supposed to regulate non-state assessments for compliance with the curriculum and that they meet the testing standards, or the extent to which these tests accomplish the set assess-

ment goals. Below is a summary of the main national assessments administered in Kenya along with details of the cohort of learners, the targeted focus area, and the agency that administers the test.

Table 4: Summary of the Learning Assessments in Kenya

Type of test/ assessment	Objective(s) of the test including testing 21st Century competencies	Administering agency or organisation	Grade/Age at which test is done	Integration into national testing policies?
NASMLA (National)	To evaluate the education system at various levels of basic education. The assessments measure learners' proficiency in literacy, numeracy, science skills expected at the targeted grade, and more recently NAC has integrated life skills To provide empirical evidence to policy makers for appropriate interventions.	Coordinated by the National Assessment Centre (NAC), KNEC	Lower Primary: Grades 2 &3 Upper Primary: Grade 7 Secondary	Yes, MLA studies complement public examinations (KCPE and KCSE) by assessing performance of the school system rather than individual learners
SEACMEQ/ SACMEQ	Same objective as NASMLA, SACMEQ is one of the assessments under the NASMLA framework	NAC - KNEC	Primary Grade Six pupils in 15 African countries including Kenya	Yes
EGMA	To test early/ lower grade numeracy skills under the Primary Education Development project (PRIEDE, 2015-2019) funded by Global Partnership for Education	NAC - KNEC	Grade Two pupils	Yes- But not clear what happens post-PRIEDE
EGRA	To test early/ lower grade reading & comprehension competencies	NAC - KNEC	Lower grade learners in Kenya from Grades 1-3	Yes

Uwezo Learning Assessment	A citizen-led approach to assessing learning outcomes. Its aim is providing credible data that stimulates policy dialogues and drives educational reforms. Uwezo tests foundational competencies in basic literacy (reading and comprehension) and basic numeracy	USAWA (Uwezo was formerly a project of Twaweza East Africa)	Learners aged between 6-16 assessed on the mastery of grade 2 work	Similar to national assessments except that it is administered at the household level
ICAN	To assess numeracy and foundational competencies for lifelong learning	PAL Network	Children between aged 5-16 (in and out of school)	Aligned to UNESCO global assessment framework, which also informs many of the national assessments and SDG tracking
ALIVE	To measure values and life skills acquisition among adolescents in East Africa	RELI- Thematic Group Values and Life Skills (VALi)	Adolescents (13-17 years) in and out of school	Yes- but the degree to which this is done is not clear because assessment of life skills in the region is in its infancy stages
ELANA	ELANA (Early Language, Literacy and Numeracy Assessment) is an extension of ICAN, which was launched in 2021 and is a digital tool	PAL Network, Pratham/ASER India and ACER under the KIX program	4-10 years in 12 countries. It orally assesses children at the household level and prioritises pre-school learners.	Yes - an international assessment tool which collects comparable data for SDG tracking
Play measurement tool	To assess social emotional learning skills among younger children.	RTI International funded by LEGO Foundation.	Children in the lower grades, ECD level to Grade 3.	No- Pilot stage.

Source: Jaslika Team's own compilation from various literature sources

Combined, the above assessments cover nearly the entire basic education cycle with the exception of the matriculation/national examination grades (Class Eight and Form Four) in the 8-4-4 education system, which is being phased out. From the analysis (both desk review and interviews) the points of synergy between these assessments are not clear. This could be a factor that impacts on how the final results are utilised to affect system-wide reforms and improvements rather than piece-meal changes at different professional levels, for example, head teachers, sub-county/county quality assurance and county education officers, among others.

Almost completely overlooked is the assessment of outcomes among children with

disabilities by both the government and civil society. The Uwezo Learning Assessment, for example, measured visual acuity only in 2011.

“UWEZO tested visual ability by assessing children’s ability to read something from a distance of six metres and seeing whether low vision might be contributing to the learning crisis” **CSO Representative**

“We are assessing very few learners living with disabilities - only those whose disabilities cannot hinder them from reading the normal text on the Learning Assessments. We haven’t gone to those who need braille. And we haven’t also involved those who need to use sign language because we don’t have the competencies in the field to conduct such kinds of assessments” **CSO Representative**

A similar situation applies in the MoE supported assessments. In the words of a senior policymaker,

“They [assessments like NASMLA] don’t extensively look at special needs. You do get mentions of disability here and there, but it’s only a small proportion of learners with special needs because there are other learners and quite a large number that probably wouldn’t fit into some of these assessments. What I have seen them do is mainly focus on learners with visual disabilities sometimes but not to a satisfactory extent. I think it’s just brushing on the surface” **Policymaker**

This concern over exclusion has inspired Pratham, ASER Centre in India to develop the Assessment for All (AfA) toolkit, which measures learning outcome among children with disabilities aged between 5-16, and who have received a minimum of two years of educational assessment (<https://palnetwork.org/assessment-for-all-an-approach-to-make-learning-visible-for-all>). Since it is an open-source tool that is adapted to both children with special needs and those without, the AfA tool will be a welcome addition that ensures assessment of all children no matter their situation. Besides AfA, one key informant also indicated that TUSOME assessments have started to integrate items in the assessment tools that focus on learners with visual and hearing disabilities

“They [Uwezo/USAWA] do not address issues of special needs to a satisfactory level as well. You get to read the report and even where special needs education is mentioned you get a very superficial mention” **Policymaker**

“For the Play project no, but the Tusome team has, actually I think in the last two years of their implementation they have developed materials for special needs learners. So provided materials for them that are inclusive; so, they focused on visual and hearing, so there were materials developed specifically for those two categories” **CSO Representative**

3.3 21st Century skills as an emerging area of assessment

The growing relevance of 21st Century skills in today's education diminishes the importance of rote knowledge and emphasises the acquisition of highly complex skill sets in line with the rapidly changing and globalised world (Griffin and Care, 2015).

Underpinning the globalised world is the digitised information economy. Besides technological changes, ILO (2021) also identifies sustainable development, climate change and the green economy, demographic shifts that affect workforce composition and skills needs, and globalisation of production, work, trade and consumption as critical factors that now influence how work is organised. They emphasise the need to retool and upscale workforce training. In particular, changes in information, communication and technology now drive virtually every aspect of people's lives in ways not imagined before-whether the personal, professional, social, political, or economic sphere. The new imperative for contemporary education is, therefore, to prepare learners for life in the 21st Century, with skills and competencies that will be essential for young people to navigate a rapidly changing, competitive, and technology-driven environment of work, social and economic spaces. Hence, the expectation is for today's learners to "leave school with an accomplished and well-sorted set of 21st Century skills in their backpack in order to succeed in life" (Greiff and Kyllonen, 2016:243). In view of this changing education landscape Griffin (2015) argues that,

"Teachers need to prepare students for jobs that have not yet been created. In the future there will be technologies that have not yet been invented; there will be ways of living and thinking and learning that have not yet emerged. [...]. Education is now about the preparation of students for new ways of thinking: Ways that involve creativity, critical analysis, problem solving and decision making. Students need to be prepared for new ways of working that will call upon their communication and collaboration skills. They will need to have a familiarity with new tools that include the capacity to recognise and exploit the potential of new technologies. In addition, they will need to learn to live in this multifaceted new world as active and responsible global citizens. (Griffin, 2015: vii)"

Whereas there is consensus on the need for re-orienting education towards meeting the new global challenges through the teaching and learning of 21st Century skills, contestations and a lack of clarity abound regarding their conceptualisation (Chalkiadaki, 2018; Bozkurt, 2020; ILO, 2021; Griffin and Care, 2015; Voogt and Roblin, 2012). The 21st Century skills are variously referred to as lifelong learning competencies, key competencies or core skills (Voogt and Roblin, 2012).

In the Global South there is greater emphasis placed on life skills, which are also interchangeably referred to as transferable skills, soft skills, interpersonal and intrapersonal competencies, and social and emotional learning (Hoskins and Liu 2019: 10). By whatever name, these skills are broad and defy a static definition because they are contextual and their application situational, bounded by time, place and task-specific demands.

Furthermore, a distinction is made between skills and competencies. Griffin and Care (2015:6) distinguish between skills and competencies by elaborating that “skills are the things people can do and competence as a measure of how well they do them. A competent person adjusts the performance of a skill to the demands of the context in which the skill is required” (p.6). Whatever measurements are designed must discriminate between higher and lower order skills and performance, making it challenging to develop effective tools.

At the same time, scholars have called for a new set of assessments because traditional forms of assessment may not be suited to the measurement of many twenty-first century skills, especially those that might be considered non-cognitive, (Griffin and Care, 2015). As changes to the curriculum occur, an important question occupying the minds of educators and policymakers is how we know that children are acquiring the intended skills.

Measuring 21st Century skills is an emerging area of assessment. To date there is no unified framework of 21st Century skills or what ILO calls core skills for life and work (Bozkurt, 2020; ILO, 2021). However, a movement has coalesced around research that explores models for conceptualising 21st Century skills, their teaching and learning, as well as measurement of the same. Published systematic reviews, meta-analyses and comparative studies show that several frameworks for defining and measuring 21st Century skills frameworks have emerged (see ILO, 2021; Bravo, Chalezquer and Serrano-Puche, 2021; Bozkurt, 2020; Hoskins and Liu, 2019; Chalkiadaki, 2018; Voogt and Roblin, 2012).

A lot of attention has been paid to contextualisation and testing individual or selected skills sets such as life skills, creativity and technological/digital skills (Henriksen et al., 2021; Hoskins and Liu, 2019), collaboration (Evans, 2020), and the link between specific skills (e.g problem-solving) and academic performance (Karatas et al., 2017).

Others have examined what subjects are most effective in supporting the teaching and learning of 21st century skills (Hoskins and Liu, 2019) (Bozkurt, 2020), the teaching and acquisition of these skills at a given level of the education system (Chalkiadaki, 2018), and measurement of the skills (Griffin and Care, 2015; Greiff and Kyllonen, 2016). By far, some of the most researched of the 21st Century skills are computer and information literacy, creativity, collaboration, and collaborative and complex problem-solving skills (Voogt and Roblin, 2012).

A robust scholarship in the field of 21st century skills has resulted in numerous frameworks, the vast majority of which are developed in the Global North but have become very influential globally for the on-going education reforms. The main leaders in the field include OECD, Partnership for 21st Century consortium led by the US government; Skills, Assessment and Teaching of 21st Century Skill (ATC21S) project and the European Parliament and Council and the ILO whose framework also takes into account new demands placed on learning and the world of work as a result of the Covid-19 pandemic and concerns for green economy (ILO, 2021).

Their efforts have also created demand for multi-sector public-private partnerships. Large multinational ICT companies like Intel, Dell, Microsoft, Cisco have partnered with government ministries of education, private education testing and research consulting firms, as well as academic research institutions and education ministries to develop large scale assessments. Some of the most common frameworks emerging from these types of collaborations are summarised in Table 5.

Table 5: Summary of major 21st Century global skills frameworks

Framework	Developers	Skills' Focus
Assessment and Teaching of 21st Century Skills (ATC21S)	A private-public partnership that included Cisco, Intel and Microsoft working with a consortium of academic and research institutions led by the University of Melbourne and University of California Berkeley, and six participating governments of Costa Rica, USA, Finland, Singapore, Australia and Netherlands Griffin & Care, 2015)	10 skills grouped into four categories: ways of thinking, ways of working, tools for working; ways off living in the world. Assessment focuses on three overarching skills (problem solving, decision making and collaboration) referred to as the meta-skill of collaborative problem solving. How students learn is equally important, giving rise to a second overarching set of meta-skills defined as learning through digital networks (ICT literacy, personal and social responsibility skills)
Global framework on core skills for life and work in the 21st century (2021)	ILO (2021)	Four groups of core skills including; Social and emotional skills (communication, collaboration, teamwork, conflict resolution, negotiation); Cognitive and meta-cognitive skills (e.g self-reflection, creative, analytical and critical thinking, planning, organising and career management); basic digital skills (e.g use of basic hardware & software, operate safely in an online environment); and basic skills for green jobs (environmental awareness, waste reduction & management and water /energy efficiency).
OECD Future of Education and Skills 2030	OECD	Three groups of skills -Interactive use of ICT tools such as language, knowledge, information and technology; -Interacting in heterogeneous group egg. Teamwork, cooperation, conflict resolution, and collaboration; -Acting autonomously: developing personal projects and life plans, asserting own rights
P21 Framework for 21st Century Learning	Partnership for 21st Century Skills (USA), led by US State Department for Education and IT companies Apple, Cisco, Microsoft, and Dell.	Three core skills groups of: Learning and motivating skills (e.g creativity and critical thinking); information, media & technology skills; life skills and career skills (e.g initiative, self-direction and flexibility). The framework also identifies core 21st century subjects and important themes such as professional development and curriculum reform and instruction

a. Guiding Principles for Learning in the 21st Century b. A Global Framework of Reference on Digital Literacy Skills	UNESCO	The guiding principles document examines the fundamental questions of the purpose of education, what subject areas are necessary for students to function in a changing 21st Century world, and how learning can be supported and assessed. The second lays emphasis on what digital skills are and why they are essential in today's education systems.
EnGauge 21st Century skills	North Central Regional Educational Laboratory (NCREL) and Metiri Group, with funding from US Department of Education	Digital age literacy skills, inventive thinking skills, effective communication skills and high productivity competencies
National Education Technology Standards (NETS)	International Society for Technology in Education-ISTE, (multi-country, including USA, Norway, and Asian countries)	Digital literacy
Technological Literacy Framework for National Assessment of Educational Progress (NAEP)	Developed by WestEd for the National Assessment Governing Board of the US.	To provide an assessment criterion for assessing grades 4,8 and 12 learners' knowledge and application of digital literacy skills in United States

Source: Authors' own compilation based on: Voogt and Roblin, 2012; Chalkiadaki, 2018, ILO, 2021; (Bravo, Chalezquer and Serrano-Puche, 2021)

For the Global North, there is very strong and clear articulation of the importance of digital literacies in the reformed education, in addition to all the other skills. This clarity is despite the theoretical debates on the significant role of ICT and information literacy in 21st Century skill.

An unresolved debate is whether computing and information literacies are overarching or standalone skills that facilitate acquisition of 21st Century skills, which is notable in ATC21S and P21 frameworks (Griffin, 2015; Voogt and Roblin, 2012), or that ICT is embedded in 21st Century skills, which the UNESCO, EnGauge, OECD and European Parliament frameworks exemplify (Bravo et al., 2021).

Despite these debates, it has become clear that digital literacies are now as important as the traditional literacy and numeracy skills and are absolutely essential in the current digital economy, enabling new ways of learning, interacting and living.

3.4 Regional and national strategies for assessing 21st Century skills

Within Kenya, the East African region and indeed in most Global South contexts, 21st Century skills seem to be broadly defined as life skills. Hoskins and Liu's (2019) in a publication on behalf of UNICEF Middle East and North Africa (MENA) and World Bank argues that life skills are integral to children and young people's educational achievement, professional success as well as personal empowerment so that they can be active citizens.

The call for integration of life skills into the school curriculum echo the Global North's call for integration of 21st Century skills, but there is greater emphasis on lifelong learning, a holistic education and multiple pathways to learning which these skills enable (Ibid). In line with this, the UNICEF MENA region has developed the LSCE Framework (Life skills and Citizenship Education).

The model defines life skills as “transferable skills that enable individuals to deal with everyday life, and to progress and succeed in school, work and societal life” (Hoskins and Liu (2019:7). The total composite of life skills consists of attitudes, values, behaviours and knowledge domains. LSCE identified 12 interconnected and mutually reinforcing life skills across four dimensions of learning that include:

- **Learning to know:** includes creativity, critical thinking, problem-solving, all of which enable learning
- **Learning to do:** cooperation, negotiation, decision-making which are critical for employability
- **Learning to be:** self-management, resilience, communication, which facilitate personal empowerment
- **Learning to live together:** participation, empathy, respect for diversity for active citizenship.

The model was informed by extensive research where empirical evidence on learning outcomes was based on randomised control trials and quasi-experimental designs in addition to reviews of existing global 21st century skills frameworks. On several skills categories it is very closely aligned to the ATC21S framework. It was then validated within the MENA region.

However, the developers caution that these skills are not fixed. They are fluid across the learning domains, and more importantly, their definitions need to be adapted to country-specific realities if they are to have value for learners in the given context. The model also discusses the various tools used to measure specific skills for example the Connor-Davidson Resilience Scale (CD-RISC) used in China, Korea, the US, Spain, or the Resilience Scale for Adolescents (READ) used in Italy and Norway.² Such initiatives are useful resources that the East African region can learn from.

Specific to the East African region, a regional scoping study of life skills in East Africa by Wamahu (2019) on behalf of Echidna Giving identified 40 of the recognised life skills and competencies which are taught to adolescents by various organisations either formally, or within informal spaces outside school settings. These included problem-solving, assertiveness, empathy, persuasion, citizenship, self-esteem, collaboration, resilience, creative thinking, and leadership skills among others (for a full list see Wamahu; 2019: 30).

What is notable is that out of the total 40 life skills mentioned by study participants, the most essential for adolescents were identified as decision-making (mentioned by 75% of the 16 participating organisations), interpersonal and critical thinking skills (mentioned by 69% of the participants).

2 https://www.unicef.org/mena/media/7011/file/Measuring%20life%20skills_web.pdf.pdf

Others include communications, self-awareness, leadership, and communication among others. In addition, the skills are aligned with those identified by UN agencies for integration into national curricula and which are clustered into three broad categories of knowing and living with self; knowing and living with others; and effective decision-making (Wamahiu; 2019: 31).

3.5 Measuring 21st Century and Life Skills: Challenges and Opportunities

Whether labelled as 21st Century or life skills, proponents of the new skills and competencies for 21st Century living agree that they are challenging to measure (Hoskins and Liu, 2019; Wamahiu and Bapna, 2019; Griffin and Care, 2015). Hence, one of the most arduous tasks of educators today is the development of appropriate measurements and tools for 21st Century skills.

“If you look at the media right now, you will see everyone saying we train people in values and life skills. But how can we measure that what we are training is really working?” CSO Representative

The lack of robust measurement tools limits the ability of many education systems to integrate these skills into their curriculum (Hoskins and Liu, 2019; Voogt and Roblin, 2012). Further, Hoskins and Liu, (2019) argue that the limited integration is a consequence of the skills not being well understood in the first place, besides the difficulty associated with how they can be taught and learnt, and how they can be assessed and measured. Griffin and Care (2015) acknowledge the biggest challenge in the development of assessments for 21st Century skills is the high failure rates at scale despite success at the pilot stage. In their view, “It is often difficult to take a new approach, particularly in the field of assessment, and scale it up to international or global level” (Ibid, P14). The complexity, yet importance, of assessing life skills and values is captured in the following words by one key informant working in this space.

“The assessment of literacy and numeracy has a lot of tacit elements that it’s straightforward. You know you are either getting it wrong or right or one can count the mistakes you are making and so on but life skills and values are like a continuum and you never know when it stops or ends. It’s not black and white, it’s incremental. It’s not properly defined; there is what is inside the person that they may not even be externalising and you paying attention to so that what I have now appreciated over the last two years is now another level of transformation of how complex some of these things are and yet again the fact that whatever gets measured, gets attention. So unless we are able to measure the CBC competencies and values we can never know or claim that we are making progress in nurturing these competencies in our children” CSO Representative

As a result, the assessment of life skills and values, when it happens, remains localised and small scale (MoE Officer E). Policy-makers and educators have to think carefully about the scope of their tests and perhaps invest heavily in intensive and large-scale piloting before launching their products for national and cross-national use.

The value of collaborative efforts across countries and even continental levels are becoming more apparent. The Echidna Giving scoping studies (Wamahiu and Bapna, 2019; Wamahiu, 2019) on the potential for the co-creation of tools to measure the impact on life skills on adolescent girls in East Africa reported that the majority of organisations were willing to be part of the efforts to develop open access assessment tools for the region (Wamahiu, 2019). Both the Echidna East African and Indian studies found that overall implementation of life skills in the respective educational curricula were weak, despite the skills being identified as an important learning outcome (Wamahiu and Bapna, 2019).

In Kenya, Uganda and Tanzania there is also limited evidence of alignment of the education systems to life skills despite two decades of rhetoric on the value of the skills and implementation of numerous programmes by state and non-state actors (Wamahiu, 2019). It is thus not surprising there are few assessments, with Wamahiu concluding that assessment of life skills in the East African region was still in its infancy stage.

There was limited evidence of the necessary resourcing and support to enable their acquisition and development among pupils (ibid). Their discussion in existing education policies seems limited, as are the allocated funds, teacher preparation, and tools/frameworks for assessing the same (Ibid). This finding was reinforced by several key informants (MoE Officer L; CSO Representative E) who reported on the de-prioritisation of life skills and values as a curriculum subject. One policy expert interviewed for the present study observed,

“The National Education Sector and Strategic Plan [2018 -2022]; if you go to page 20, in fact you will not find any issue related to peace education or life skills. The only thing that I’m sure of is that, what we have in life skills has actually been generated particularly if you look at the summative evaluation of the curriculum by KICD in 2009, that is the one that tells you that the issues about life skills that are not given the kind of weight they should have. In fact, the life skills books that we have, given the issue of the life skills lessons, actually emanated from that particular summative evaluation that led bare the facts that teachers even don’t teach life skills, they concentrate more on the examinable subjects and if I can take you slightly further before 2009. You remember the post-election violence of 2007-2008? If you look at the people who participated in the chaos and the violence, they were basically young people who have gone through the school system. Meaning that there are certain values and life skills that they had not being able to grow per se but if you look at for example, the way they set exams and a question like, how for example you can resolve conflicts and the students you need to write down those things and they will talk about dialogue, mediation, they will talk about all those things.” **Policy expert**

Despite the identification of life skills and values as a critical policy concern, and consequently its inclusion as a pillar in the Basic Education Curriculum Framework 2016, challenges in coming up with credible national Learning Assessments focusing on this area persist.

According to Hoskins and Liu (2019), most of the existing assessments are privately owned and hence, are costly. In addition, few instruments are innovatively designed to measure the more sophisticated skills as most tools still focus on basic literacy (González-Salamanca, Agudelo and Salinas, 2020), and are based on the traditional self-scoring system (Hoskins and Liu, 2019). Equally, very few are adapted to low-income countries' context (ibid). The multi-dimensional nature of life skills also means different sets of tools are required to measure different dimensions, but currently many of the available tests measure singular skills like collaboration, critical thinking, and communication (González-Salamanca, Agudelo and Salinas, 2020). Furthermore, the ability of tools to discriminate different student abilities and achievements is a challenge, especially when measuring cognitive and non-cognitive attributes, values, and behaviours (Hoskins and Liu, 2019). Since proficiency levels are not defined for most life skills, setting benchmarks can be a challenge because there are no absolute levels and besides, the cultural and social contexts also dictate how a certain skill might be measured or understood (ibid). This challenge was well articulated by one informant.

“My appreciation is that these assessments have been more successful in highlighting problems in learning academic knowledge than in highlighting problems with social emotional learning. That’s probably because standards are better defined generally in academic knowledge than in social emotional learning from which people can say hey! For our children to do this kind of thing at this level and other kind of thing at a different level, let it be low or high but it’s really nothing that you can say we want to achieve this, this is the minimal that we want our children to be in terms of empathy, in terms of solving social conflicts, in terms of this kind of skills that are very recently been part of the educational discussion in terms of inclusion in the curriculum” **CSO Representative**

The informant above also indicated that some PAL network partners are working with developers of LSLAs (TIES) to develop tools for measuring social-emotional outcomes in emergency contexts in Syria, Lebanon and others. This work, which is still in early development, is expected to inform ALIVE and provide useful input for assessing outcomes of education in emergency contexts globally.

Besides the challenges of deciding what skills to measure, the measurement tools themselves can be difficult to design because of the context and language (006/KII/CSO/M). Translating certain ideas might generate different meanings, whereas the same language may be used differently by the speakers. An example of this is the use of Kiswahili in Kenya and Tanzania, which developers of the ICAN and ELA-NA assessments encountered.

Few assessments transcended the above challenges, but as far as multiple 21st century skills assessment is concerned the PISA, described by an informant as “the gold standard in international assessment programs” (006/KII/CSO/M) and OECD tools have made some significant gains. These two measure digital competencies and collaborative problem solving, with an expected addition of multicultural

understanding, empathy and autonomy (González-Salamanca, Agudelo and Salinas, 2020). In addition, Hoskins and Liu, (2019) offer three solutions to overcoming the assessment challenge by firstly using computer-based assessments; secondly, using situational judgment tests, which are developed by building scenarios and learners discuss and justify their choices; and finally, utilising vignettes that participants use to rate other people's behaviours and the ratings form the basis for evaluation of specific competencies.

The AT21CS project has also been an illustrative example of how to develop complex measurements. Griffin and Care (2015) provide a detailed theoretical and methodological account of the processes involved, which is a useful resource for those wishing to develop their own bespoke assessments. A unique feature in ATC21S is that the tool is global and is being tested across countries in different continents and contexts, and secondly, the tool also embeds graduated levels of skills acquisition (González-Salamanca, Agudelo and Salinas, 2020). To mitigate the cost element, some organisations are investing in the development of open-source tests like ALIVE is attempting to do.

ALIVE is one of the initiatives that responds to the challenges of life skills measurement within East Africa, while ICAN, an initiative of the PAL Network is a front runner on the same in the Global South (See PAL Network, 2020). ALIVE was strongly influenced by the Echidna Giving Study whose recommendations have been taken up by RELI and others. The precedence within the East African region through Uwezo literacy and numeracy assessments gives ALIVE a useful launching pad in terms of how to scale up national CSO-led initiatives.

A number of CSOs have taken up the challenge to develop appropriate frameworks for the measurement of like skills. However, there will be a need to involve the state on a wider scale if the initiative is to have wide acceptability and impact on the national education systems. Previously, non-state actors have led similar initiatives but often, their tools are not robust enough or remain limited in scope. The same time, not all policymakers acknowledge the contribution of CSO assessment efforts even though they may utilise the data generated.

It is thus not surprising that one of the recommendations of the ECHIDNA East African scoping study was to co-create a tool that could measure life skills but for the initiative to succeed in terms of acceptance and uptake it would need to involve a cross-section of stakeholders such as ministries of education, curriculum development centres and civil society organisations (Wamahiu, 2019), which the ALIVE has attempted to do.

4.0 Evidence uptake for policy and practice in Kenya

4.1 Introduction

Research-based evidence can positively impact quality, design and effectiveness of policies. This is especially true in contexts of extreme vulnerability to climate change and economic shocks where governments are struggling to ensure sustainable development (Goldman and Pabari, 2021). Linking research to policy and practice firstly ensures policy decisions are informed by and anchored on a solid evidence base. Secondly, it minimises policy failures and wastage of resources on unworkable programmes, and thirdly it can also drive innovations which have the potential for society-wide transformations.

However, global literature indicates that the relationship between evidence production and its utilisation may not be linear (Manning, Goldman and Licona, 2020), meaning that data availability is not the main reason for failure to utilise evidence for decision-making. In this chapter, we examine the perspectives of key informants on research evidence utilisation for policy influencing and explore opportunities, challenges and strategies for the uptake of evidence for educational policy and practice in Kenya.

4.2 Policy development process in Kenya

The stages of policy development include setting the agenda, policy formulation inclusive of validation, dissemination, implementation, and evaluation. Though the textbook version of policy development suggests a linear process, in reality this may not always be the case.

In Kenya, policies are made at two levels - national and county. The Kenyan Constitution 2010 vests the primary responsibility of education sector policy development in the MoE. At the MoE, the policy proposal in the form of a concept note is developed internally, by its officers rather than consultants commissioned with support from external donors. This, according many key informants, was largely due to resource constraints mainly from CSOs. A key informant pointed out that the process in Kenya was different and sometimes causes unnecessary delays that when you use consultants.

“I find the ways its done here [Kenya] to be a bit different from other countries. Because I have done policies for other countries, where you work as a consultant and with a few people; then you just validate the policy” Policy-maker

While the Directorate of Policy, Partnerships and EAC leads in the policy development process, they do so collaboratively working through technical working groups (TWGs). The technical working groups have representation from other relevant directorates within the MoE, as well as MoE line institutions, selected faith-based organisations, civil society organisations and individual experts. The precise composition of the TWG depends on the focus of the proposed policy.

“If it’s something that is on religion or has issues to do with values, then you make sure that there is somebody from the church or the Muslims or something like that and so on and so forth, if there is something that requires a scientist to be represented” **CSO Representative**

The approval of the Principal Secretary for the TWG is sought through a letter. Attached to the letter is a concept note focusing on the proposed policy and a list of recommended technical working group members.

A key informant illustrates the policy development process using the Physical Education and Sports Policy (2021) as an example,

“You know, physical education was there under the 8-4-4 but somehow like not given the right priorities, being neglected as it is not an examinable subject. But now it has come under the CBC as a critical area being emphasised, even because of its combination with sports. And within that line of sports and activity, trying to improve that and the way those policies are developed. They are developed through a multi-sectoral approach. So you find in such an area, there are many partners, there are many people who are involved there to develop to come up with that policy and therefore many ideas are brought together. In Kenya, the policies are being developed by the government with the participation of the private sector, and the participation of various stakeholders. Because one of the requirements and I think this one, is also in the constitution is public participation” **Policymaker**

The above quote highlights two additional points. The first is the adoption of a multi-sectoral approach, which is consistent with the whole child development embedded in the Kenya Basic Education Curriculum Framework (2016). The second is public participation in policy development. Public participation is a constitutional requirement in policymaking and implementation (Constitution 2010, article 118). Both these elements have implications for taking forward the life skills and values education agenda.

4.3 Utilising evidence in policy and practice

There are opportunities at critical junctures of the policy formulation and implementation chain to utilise evidence generated through research and Learning Assessments. These include identification of new issues for the policy agenda, informing decisions about policy content and direction through problem diagnosis/situation analysis, policy enforcement and evaluating the impact of policy and feeding the findings back to policy review.

Opportunities for the uptake of the evidence in education policy and practice may also be found in the design of research studies and assessments and the dissemination plans. However, as the following discussion shows, these opportunities have not been fully exploited, resulting in non-utilisation, or at best, inconsistent utilisation of evidence in the education policy process.

4.3.1 Agenda Setting

Agenda setting is the first step in the policy development process. It is a process through which public interest issues or problems are prioritised and placed on the policy agenda. There was a consensus among government functionaries and civil society policy experts interviewed that evidence-based policy making is the ideal. However, evidence is not always utilised in setting the policy agenda in the Kenyan context (CSO Representative H/; CSO Representative E; MoE Officer C1). Instead, there is an array of other influencers of the policy agenda that take precedence over utilisation of research evidence, including:

The Kenyan Constitution 2010: Though the current Constitution of Kenya was enacted more than a decade ago, education policies and practices are yet to be fully aligned to it. The MoE thus uses the Constitution as a broad framework for setting the policy agenda, responding to identified challenges felt needs and gaps in its implementation.

“What the constitution says is not done, you pick it up and use it to guide policy” **CSO Representative**

Politics: Policy development is a political process. In Kenya, as in many other countries, what gets onto the agenda is determined by the government providing the, “political direction” through gazette notices, circulars and “decrees by the head of state and so on and so forth”. At any rate, it is expected that the policy agenda must be aligned to the priorities of the political leadership. As a former policy maker pointed out.

“There is no way you are championing a policy that is against the political stands of the leadership” **CSO Representative**

The government is often perceived to play to the gallery, swayed in their policy decisions by anticipated personal returns. As one policy expert explained it in the context of deprioritisation of special needs issues, evidence uptake is largely driven by the politics of the day.

“The use of evidence is largely driven by need and politics and reconciling those two issues can be a nightmare because that is how you prioritise the wrong things” **Policymaker**

“The problem of this population of learners with learning disabilities, it is believed they are very few, so it is not going to attract votes if you applied interventions. You would rather do something that you feel would get noticed in every household in the country” **Policymaker**

Organised interest groups: These include faith-based and secular civil society organisations that are driven by specific ideologies rooted in culture, values and/or religion. Lobbying is used as a strategy to influence policymakers towards what they see as desirable policy priorities and outcomes. The impact of these influenc-

es may be either positive or negative. An example of negative influence is the resistance from faith-based organisations to the provision of sexual and reproductive health education in schools despite the evidence linking it to a reduction in high rates of teenage pregnancy and high-risk behaviour among adolescents. The sexual and reproductive health education typically integrates values and 21st Century skills into the teaching content and delivery.

Resource availability: Whose agenda gets prioritised depends to a large extent on who funds the policy development process. According to a policy expert, there has been “very good support from the development community to development-based policies. For example, the UNESCO, UNFPA, Population Council and Sexual Reproductive Health and Rights Alliance (SRHR) supported the MoE to develop the national guidelines for School Re-Entry in Basic Education (2020), which incorporates re-entry policy for pregnant and lactating schoolgirls. There is concern that sometimes the assistance comes with challenges associated with lack of continuity when the support ends.

“The government may have a challenge of finances or financing” thus providing an opportunity to “development partners to come on board and support development of those policies” **Policy maker**

According to a policy expert, there has been “very good support from the partner community to development-based policies” (CSO Representative H). This has its own challenges however, “because if you are relying on partners, it means we will develop policies that are of interest to partners, and where the interest is not there, the policy will be pending” (Ibid). For example, the UNESCO, UNFPA, Population Council and Sexual Reproductive Health and Rights Alliance (SRHR) supported the MoE to develop the national guidelines for School Re-Entry in Basic Education (2020), which incorporates re-entry policy for pregnant and lactating schoolgirls.

Politicking: It is important to differentiate here between politics defined earlier as the direction provided by the political leadership, and ‘politicking’. As used in the present context, politicking refers to manipulation of the policymaking and implementation process by individuals from within the system to promote their personal self-interest at the expense of the common good. It may manifest itself in unexplained delays and repeated disappearance of critical documents including potentially influential research reports shared by CSO partners and experts with the MoE. Multiple key informants confided negative experiences with the MoE and line institutions. The net results of all this, as one informant alleged, was the shrinking of democratic space that is:

“Limiting the collaboration between non-state actors and the school level communities and that’s to me a challenge, there is no policy one can point out and say this is the policy that is constricting, whether they are circulars and memos that in my view are undermining” **CSO Representative**

It may also be driven by anticipation of material, financial and non-material gains from external parties hoping to peddle influence within the ministry and promote their agenda through the backdoor.

4.3.2 Policy formulation and decision-making

Some policy experts disputed the assertion that research evidence is underutilised in education policy making in Kenya. These experts - current and former MoE officials - noted that the evidence generated by assessments undertaken under the auspices of the National Assessment Centre (NAC) influences policy formulation as well as education planning and programming though this may not be immediately evident to the end users like teachers. In the words of an informant, referring to the 2021 Physical Education and Sports Policy,

“In terms of the impact of these assessments on policy, I have talked about the Class Seven assessment which we did in 2019 and one of the key issues we found out was that many of the schools did not take PE seriously. We recommended a policy on P.E. and I can assure you that policy has been developed”
Policymaker

Similarly, some policy experts explained, the purpose of SACMEQ assessment at inception was to inform policy; policy formulation, policy decisions and decisions making and asserted that it has been utilised greatly in policymaking particularly in looking at the status of schools in terms of infrastructure and learning materials such as text books among other things. Many of those familiar with the test therefore see SACMEQ as an example of an internal tool that has helped government improve delivery of education.

“The test was to help in understanding the status of the schools in the country, especially the primary school, because this is the foundation. So that’s why it was done for primary school and so it is looking at these learning outcomes, linking them to all those other factors. I remember, we were to look at issues like, are the schools stating the number of days that are supposed to be there? So it was looking at really, what is required for children to be comfortable in school and to learn; do they have a classroom and they learn in the classrooms? Do they have desks? Are too many children sharing desks? Do they have books?” **Policymaker**

“In SACMEQ, there were tests about how many children are sharing books. And so, you could see from the very first SACMEQ, where children as many as four-five were sharing books and progressively when the government started giving books, you could see the change where they are sharing two children a book and some situation where each child has got a book. So that was the interest of SACMEQ to give information, to give feedback to the ministry. It is an internal thing to the Ministry to have information to know where you need to improve” **Policymaker**

The findings of Learning Assessments like Uwezo, SACMEQ and NASMLA were also reportedly used by decision makers to plan quality education and influenced the

MoE to embrace programmes like Tusome. The policy put a ceiling of two as the maximum number of pupils who could share a book. Evidence subsequently generated through experiences of civil society organisations persuaded the MoE to invest in providing textbooks for each learner under the Tusome program.

“Like now in Kenya the policy of 1:1 book was incorporated because of the Tusome project experiences. The government came to learn that every child can have a book, and it’s beneficial because we have seen results. So, in every school, the government is making sure that every child’s expense of having a textbook is on them“ **CSO Representative**

The SACMEQ assessments in the early years also contributed to the institutionalisation of gender-sensitive indicators, placing them on the MoE agenda. The policy experts interviewed recalled that key benchmarks and indicators were concretised and fed into the EMIS working very closely with the statistics people

“That’s when we came to learn about benchmarks because some of these things, some of these indicators were not even in the Ministry; they were not even part of the discussion. A lot of the feedback that came from the SACMEQ and which made a lot of changes is the analysis of data and the indicators which were not given priority or were not given any attention at that time. So, as you have mentioned, the pupil-toilet ratio was nothing that was discussed by gender because now SACMEQ brought it by gender. Looking at enrolments by gender by different classes, checking dropouts by gender and all those kinds of things, indicators of teacher-pupil ratio, pupil-classroom ratio, they were never part of discussion. But this was brought up in the discussion after SACMEQ” **Policy expert**

Nevertheless, as initially conceptualised, the primary purpose of the Uwezo assessments was to generate data for policy advocacy.

4.3.3 Situational analysis

Situational analysis, an integral component of the policy development process, is necessary to help define the nature and scope of the problem, explain the policy gap, identify what strategies are in place to overcome them, and provide information necessary for decision making and planning, among other things. Though research evidence may not be used to set the policy agenda, research and assessment findings inform the situation analysis.

“Findings sometimes comes later after another order has come. Then because of the process of making policy itself you go back to build the situation analysis” **CSO Representative**

The situation analysis involves getting insights from the fields, which according to budgetary constraints, is done internally as explained by the above cited informant,

“Among ourselves we had already developed methods of doing surveys across the country using our officers and we were able to get information and de-

velop a report. So we have what we call a special analysis, a very important component of the proxy, really trying to bring out how the situation is and bringing out the actual gap“ **CSO Representative**

A major source of data for the situation analysis was said to be review of existing literature which is accessible maybe through the internet, or through hard copies which are shared by the ministry, which are deposited with the Ministry Resource Centre.

Different perspectives, insights and issues that emerge from the situation analysis informs the policy under development. The situation analysis draws on a multiplicity of sources and not on a single assessment or research study.

“We do the situation analysis by reviewing existing literature which is accessible maybe through the internet, or through hard copies which are shared by the ministry, which are deposited with the Ministry Resource Centrebecause the policy the ministry is developing is kind of tailored towards specific thematic areas” **Policymaker**

4.3.4 Factors determining uptake of assessment findings

There are several factors, which determine usability and impact of the assessment results as evidence for policymaking and practice in education. Desk and field analyses suggest that whether the findings of a particular assessment or research findings will find its way into the policy formulation process may be influenced by the following six factors, namely:

- Legitimacy and the level of influence of the testing authority,
- The objective and design of the test
- The subject and focus of the assessment
- Alignment of assessment outcomes with politically-driven commitments
- Stakeholder engagement in the assessment process
- Outcomes dissemination strategy

a. The level of assessments and their objectives

Varied testing authority levels, which impact on how the data is ultimately utilised by different end-users and the priorities for testing in the first place. This has led to different approaches to testing and the focus. For instance, in some countries the federal, state and district levels have different tests to meet different needs. In Finland there are three different assessment levels including school-based assessments at classroom level to check progress of students’ performance over time, the national assessments conducted by the national examination agency to assess whether students are meeting the national curriculum objectives for each subject and the international large-scale assessments for comparative purposes (evaluative). The latter measures how the national education system compares with comparators for improvements (see Volante, 2020). Many countries, including Kenya, have adopted a similar approach.

Implemented across 16 countries of eastern and southern Africa, SACMEQ is de-

signed for the regional comparisons of the education systems using “sample based large scale Learning Assessments to inform policy about how learners are progressing towards achieving the stipulated learning outcomes and the predictors of learning” (MoE Officer C). It helps the participating countries to compare progress (or lack of it) on specific indicators and assign ‘bragging rights’ among those ranked well in the tests.

“They [Kenyan government] are happy that most of the children have achieved at that particular level. With the comparisons, across 16 countries now with SACMEQ, Kenya tends to come at the top, so they don’t go into the details to look at what is at the top. You know what? What comes out of SACMEQ is that Kenya is one of the top countries [in the region]” **Policy Expert**

The consequences of this may not always be positive. First, inequities in the provision of education and learning outcomes may be masked by the regional assessments. In Kenya, the gap is perceived to be very big. “What gives marks [for Kenya] is because of those top schools, which are in the random sample and that covers everything” (Ibid). Second, a study by UNESCO on the promise of large scale assessments in transforming education suggests that there is a danger of countries adopting programmes from the better performing ones without contextualising the material or strategies simply because they, too, want to be ranked equally well (UNESCO, 2019)

b. The end-user

The design of the test determines its end-use. Since most are meant for system accountability, teachers may find little application in the findings for their classroom work and student and teacher behaviour changes. If teachers do not receive the right support to interpret the findings and implement outcomes, the assessment results become redundant for this group of potential users. Moreover, teachers and school administrators are less likely to utilise test results for behaviour modification if results are used for punitive measures. For example, though not intended for this purpose, the end result of the Uwezo Learning Assessments were perceived by some teachers as being provocative and hostile to them.

c. The subject and aims of the assessment

Depending on the focus of the assessment, testing can be for accountability or for improving performance. Smith (2014) indicates that tests can be student or school/teacher focused depending on the end-use or purpose for testing. Student-focused tests for determining advancement can be high stakes because they determine students’ career trajectories, while low-stakes tests target students for improved academic progress and instructions, or accreditation purposes (Smith, 2014). Often, as Smith and Kubacka (2017) note, student test scores are overemphasised as the main tool for not only evaluating teacher performance but also for increasingly influencing education policies and reform. Better results at the school and classroom level are realised where the focus of assessments is to increase educator accountability and not to punish teachers.

An example of assessment approaches that aim to improve teacher behaviour and institutional culture was demonstrated by Tusome. This was a Kenya Ministry of

Education national literacy intervention programme (2014-2019) implemented with funding and technical support from USAID and DFID (Piper et al., 2018). An analysis of Tusome’s design, scalability, and accountability for learning outcomes showed overall positive effects on policy and practice as far as decentralised instructional support, teacher behaviour and student learning outcomes were concerned. First, EGRA results were used to improve teachers’ curriculum delivery capacity by improving instructional support for better reading outcomes among lower grade learners. Piper et al. (2018) notes that between 2015 and 2017 there was evidence “that teachers were trained on the existence of the literacy benchmarks and that actual data from Kenya were consistently shared during termly training to demonstrate and reinforce how Kenya’s children were performing relative to these expectations [...]”. Equally, training reports indicated that “the benchmarks were typically understood by the participants and that they could recall the benchmarks and what the literacy results meant by grade and language (p.305).

Secondly, evidence from a pilot intervention project (Primary Math and Reading-PRIMR), the precursor to Tusome had influenced a shift in the role of curriculum support officers (CSO, formerly known as TAC tutors) from monitoring school administration to teacher support for effective curriculum delivery. CSOs used coaching, feedback to teachers and classroom observations, with the highest number of CSO visits to schools recorded in 2017 compared to the previous years (Kisirkoi 2012, cited by Piper et al. 2020).

Regular visits by CSOs ensured fidelity to the curriculum and increased the likelihood of achieving the intended learning outcomes, though this will only be realised if the practice is maintained beyond Tusome. Thirdly, Tusome facilitated building the capacity of the MoE to monitor outcomes through assessments and thus bolstered accountability of the education system (Piper et al., 2018). Monitoring data was collected and periodically shared with county and national MoE officials and discussed in various fora.

However, notably missing in Tusome was how the evidence was used to support and improve performance in schools and counties with the worst outcomes (Ibid). To guarantee equitable learning outcomes, assessment results must also influence resource allocation, with the system appreciating “that the pursuit of equitable outcomes demands inequitable allocation of support resources” (Piper et al. 2020: 314).

3.Alignment of assessment outcomes with politically-driven commitments

Various government agencies responsible for education put in more effort, time and resources into what they see as their priority once the agenda has been set at the political level. For example, UNICEF’s commitment and interest quite clearly supports KNEC to assess CBC.

“We thought in our support to the government to implement the CBC, especially under the output we are calling quality, we are looking at the 21st Century skills as they are [already] implementing them. And to be able to do this effectively, we thought it’s good to have an output, which is purely

based on quality. And this output will be taking care of skills -- developmental skills -- which is what we're looking at in terms of 21st Century skills and also, we will be looking at the learning outcomes. So that it's not just - you know for a long time - we have been bringing children who are out of school back to school through access, but the issue is, like we have always asked, since you were in WERK for those many years, are our children learning? So the question is, after we have brought them up to school, do we need to stop at access or do we need to move on to finding out if they are learning?" **Development Agency Representative**

e. Stakeholder engagement

The extent to, and stage at which, stakeholders are involved in various steps of the assessment and research processes influences the utilisation of assessment findings. Reference was made earlier to multi-sectoral technical working groups set up to draft policies. Our data reveals the absence of similar mechanisms, especially from government-led assessments and research processes.

However, we found examples of advisory committees composed of representatives of strategic government institutions and other strategic civil society partners and individual experts guiding civil-society led initiatives. In addition, we found examples of stakeholder engagement at various stages of assessment and research implementation. Cases in point are ALIVE, hosted by ZiziAfrique; the Uwezo Learning Assessments, managed initially by the Women Educational Researchers of Kenya (WERK), later by Twaweza, and now USAWA Agenda; and the national study of value-based education commissioned by WERK.

"I very much agree with those teachers, because even when I was a teacher in the classroom both in secondary school and teacher training colleges ... , we were not aware about...NASMLA or the MLA... all those we were not. In fact, I came to know about those large-scale assessments when I joined the ministry, and I was a quality assurance officer. That is when you know" **Policy Expert**

Generally, civil society informants perceived government supported Learning Assessments were largely not open for public conversations. This perception was reinforced by teachers participating in focus group discussions. The focus group discussions revealed a lack of awareness among teachers of large-scale Learning Assessments such as SACMEQ and NASMLA, suggesting that they had not been involved in any stage of their development (Varied FGDs, Kiambu and Nairobi). A policy expert recalled his experience when he was a public school teacher, which echoed that of the focus group discussants.

"There was a time I taught in one school, in Grade One and somebody came with a laptop and interviewed my pupils and asked them to read words, sounds and even identify letters from a tablet. I was not told the kind of assessment that was. Is that the kind of assessment that you are asking about?" **Primary School Teacher**

Apart from the end cycle examinations under the 8-4-4 and CBC education systems,

teachers' engagement with, and knowledge of, large scale Learning Assessments tends to be minimal. Even in schools participating in the assessments, teachers may not be provided with adequate information about the assessments administered to their pupils.

The civil society driven assessments and some research studies involve a wider range of stakeholders in implementation of the initiatives. For example, at the time of the interview, ALIVE was anticipating inviting selected government agencies like KNEC to be participate in the development of the assessment framework.

Previously, Uwezo had already paved the way for the involvement of experts from line institutions like KNEC and KICD to participate in tools development.

“We have plans to invite have KNEC and other education agencies to part of the people who will develop the assessment framework for ALIVE” CSO Representative

While the Uwezo Learning Assessments engaged community-based volunteers in the administration of the tools, ALIVE has partnered with teacher training colleges, replacing community volunteers with teachers in administering the assessment. The change was prompted by the realisation that since teachers understand pedagogy, they would feel they have a responsibility and therefore would be more committed.

f. Dissemination strategy and intended use of the assessments

How the findings are packaged and disseminated, who is targeted by the dissemination, and when it is disseminated affect the utilisation of assessment findings in the policy process. A review of literature suggests that the results of assessments may be publicly reported in terms of each schools' performance or used mainly for internal feedback to parents and teachers. Where exam results are considered high stakes for gate keeping purposes such as determining high school and university placements in a market-based education system, publicly releasing assessment results matters for schools and parents' decisions (Volante, 2020). Generally, since most of the high stake's assessments are summative, they are perceived to have little impact on improvements in the classroom and/or instruction materials. Though in Kenya, KNEC generates reports following each national examination cycle, proposing areas of quality improvements, few teachers use the findings to improve their teaching.

“I can tell you without any contradiction that very few teachers are even familiar with those large-scale assessments like the one we are talking about now. They may just be familiar with KNEC and I would also want to say that even for them, unless for schools where the head teacher or subject heads are proactive, they may not even know that there is usually a report after every exam done. Yeah, that is true, the issue of dissemination does not go beyond I think the ministry” Policy Expert

Analysis of the FGDs suggest that only the lower grade teachers are familiar with

any of the national assessments. Their knowledge extends to TUSOME and EGMA mainly, having attended workshops on early literacy and numeracy because they teach lower primary learners. Many of the lower grade readers also appear to be elderly/ or those with several years of teaching experience.

Dissemination strategies

The data reveals at least six dissemination strategies that were used to reach out to the target stakeholders at policy and practice levels by various actors, albeit with varied results as summarised below:

i. Instant feedback provided to parents and guardians.

The culture of providing feedback immediately after assessing a child in the household has been a prominent feature in Uwezo and has successfully been used by civil society assessment initiatives such as ALIVE.

”You know assessment itself is communication. Not just waiting to have results so that you communicate but you communicate with whoever you come across” **CSO Representative**

“There were outcomes that were to be delivered through the process and one of those was engagement at the household, what we call the instant feedback at the household, conversations on the role of the parent in improving learning so we had these parent posters and calendars that had messages” **CSO Representative**

“A communication piece in the form of a calendar that has questions. As a parent do you allow your children to play with other children? Do you allow your children to lead? And we are ticking yes and no and leaving that document with the parents just to get them thinking and make them aware that I need to do this even when you ask them and they say yes I do it most of them will never say no but I am sure that when we leave that piece with them they will think and be like ‘Okay, I think I need to do something’” **CSO Representative**

ii. **Deliberately targeting policymakers.** Targeted presentations and reporting to policy managers within the MoE and institutions affiliated to it. This strategy is used by the National Assessment Centre (NAC) to facilitate access to assessment reports by education policy makers. Relevant findings are packaged as policy briefs customised to the target audiences.

“The SACMEQ and NASMLA were normally shared with the policy departments highlighting key areas that may require policy intervention so that we are able to look at them. And I think in my view that this is a very important and very objective idea to help advise policy. So, it was consumed within the policy directorate, these reports whenever they came“ **Policy Expert**

“So there are the policy briefs that go to TSC, policy briefs that go to BOM’s and parents, policy briefs that go to the ministry of education” **Policy expert**

iii. **Policy fora and county dialogues**

A key informant described the mode of dissemination of government supported assessment findings as “robust” using channels appropriate for reaching various target audiences. Policy fora, sometimes also described as county dialogues, were mentioned by several MoE officers and development agency representative interviewed. These for a reportedly engaged a variety of stakeholders and were effective in providing contextualised feedback on the areas that required improvement. The fora are usually communicated to the counties and agreed in advance. The following quote highlights the involvement of diverse stakeholders (at least five different categories) using policy fora and dialogues,

“Stakeholders were brought on board, not only the teachers and the learners, but also others; -- board members, church members and so on and so forth, everyone involved in education were taken through the policy forums looking at what came out from the NASMLA and of course from the SACMEQ so that they can also advise. So it’s again from those forums that we also picked certain people from academia who equally attended those policy forums and they were able to bring in very good ideas as to how they wanted [changes in] existing policies or maybe new policies being developed to improve the performance further” **Policy Experts**

iv. **Physical and online events.**

Prior to the COVID-19 pandemic, policy fora and county dialogues took the form of workshops and seminars. In response to the government instituted COVID-19 risk mitigation measures, physical engagements were replaced by webinars, using Zoom and other similar video conferencing platforms. With the relaxation of the social distancing protocols, both physical workshops, seminars and webinars are used to reach out to stakeholders.

The Uwezo Learning Assessment reports were disseminated in well publicised physical events supported by a multimedia strategy to reach out to the public. They targeted education actors both at national and county levels, the public and civil society. This publicity is considered very effective in helping generate discussions on topics and findings that most stakeholders may not be comfortable with. IT also helps in generating interest and coverage in print, audio-visual and digital media.

“While the [Uwezo] assessment findings were generally aligned to those of SACMEQ, the inaugural Uwezo report launched in 2009 brought the conversation around inequities in learning outcomes from the corridors of MoE into the public domain” **Policy Expert**

“It creates a lot of trouble across and why, is it? It’s because it is reported, you know, and it’s either in the newspaper or in the news but somehow it is reported and people get to hear it” **Development Agency Representative**

Uwezo's has also used various communication channels to disseminate the Learning Assessment findings. Teachers participating in the focus group discussions confirmed hearing about the findings over the radio. Others heard about the findings also through NGOs.

“I got concerned on learning from the news and NGOs that a Grade Seven pupil cannot do this [read or do Grade Two math]. You hear those reports online and from the media but never from the ministry coming directly to us” **Primary School Teacher**

Interestingly, while the public broadcasting of assessment findings was seen by most stakeholders as serving the purpose from an advocacy perspective and holding the government to account, it is also considered to have the unintended consequence of alienating the teachers

“Okay, I may not remember details of that conversation on the radio but you find that sometimes parents hear this and then they blame the teacher and sometimes it is not the teacher who is the problem. Sharing such information on the radio is not the right way of reporting such information“ **Secondary School Teacher**

“What I can say about that, the information we normally get from the media is that they give what the public wants to hear, they only highlight the weaknesses. You will never hear them talk about the strengths; they always note the negative part of it. Then you wonder if there is no teacher who is doing the right thing in this country” **Secondary School Teacher**

“The most publicised reports are the ones done by the NGOs. Actually, the problem that we used to have was the way it is presented; it is like they are fighting teachers. I remember this headline on the Nation saying Grade Eight learners cannot do simple arithmetic. Publishing the report is not wrong but the media will look for the juiciest headline even parents can start being worried about. I think those reports should be for people that are implementers. They should have those forums where they talk about those reports“ **Secondary School Teacher**

v. **School specific reporting**

At the school level, assessment findings are disseminated through online reports and examination results.

“Assessment findings are also disseminated through school specific reports, which are online so every school can check their results. “Every school in the country can know where the issues are in terms of the learning gaps” **Policymaker**

However, those having access to the reports were relatively few. One secondary school teacher, who described herself as one of those who were “privileged” because of being a Head of Department.

“My colleague, and I get to read such reports because of the position we hold in this school of being HODs, Other teachers who do not serve as the HODs find it difficult to read such reports and get feedback on the students’ performance in their subjects at a national level examination. Only one copy of the KCSE report is distributed in a school like this so you will find that such reports do not get to all the teachers by the end of the year and then we have the same problems and mistakes year in year out being done by our students because teachers do not get feedback in good time to correct their students or for them to change their teaching styles“ **Secondary School Teacher**

However, most of the teachers (from both primary and secondary levels) we talked to had not read or even seen any national Learning Assessment report (whether on-line versions or physical print copies. One of the discussants actually argued that the reports are never made available.

“If our school had received such reports of course they would be shared among teachers and if there are not enough copies, the few copies would be placed somewhere everyone can access. But those reports are not shared in hard copies but through the media we hear them“ **Secondary School Teacher**

4.4 Implications of LSLAs for assessing Life Skills and Values

As noted previously, ALIVE is the only large-scale Learning Assessment dedicated to measuring life skills and values in the Kenyan context. Before this, an initiative packaged as Peace Education was piloted in Tana River County by the MoE with support from Arigatou International. This is now being rolled out in Baringo County in partnership with World Vision. Though not a large-scale intervention, it has had significant influence on education policy and practice, contributing to the life skills and values component of the CBC according to an MoE Officer interviewed.

The KNEC administered SACMEQ/NASMLA incorporates a life skills component, linked to HIV/Aids teaching . However, the assessment mode, according to a key informant, is exclusively teacher centred, “pen and paper”. This is not considered to be appropriate for assessing life skills and values. The most influential civil society Learning Assessment, Uwezo, has no focus on life skills or values.

Nevertheless, there are lessons from these assessments that may be applied to the evaluation of life skills and values in adolescents. Below, we explore the implications of selected LSLAs for the assessment of life skills and values in Kenya, highlighting the emerging issues and lessons learnt from our review.

The specific purpose and objectives of Learning Assessments influence key

design decisions. Though the overall goal of the various Learning Assessments are similar, hinging around improving the quality of education in Kenya, the objectives may differ. This difference is best exemplified by the perceptions of SACMEQ/ NASMLA at one end of the spectrum as a planning tool, intended to inform policy and practice while at the other end, the Uwezo assessment is essentially an advocacy tool designed to engage the citizenry, generate public conversations and hold the government accountable. Though not wholly incompatible, different objectives of the two assessments have determined what should be assessed, who should participate at what level and when, where it should take place (school or household), and how it should be administered.

The design of ALIVE has been informed by its focus on life skills and values, an area where large scale assessments are rare. This lack of assessment frameworks in the area of life skills and values is reflected in its objectives, which are,
To develop open source frameworks or metrics that can assess adolescents between the ages of 13-17 for their levels of problem solving, collaboration skills, self-awareness and understanding of the value of respect.
To use this evidence to influence change.

“We are looking at systematic change”, explained the coordinator of ALIVE.

“If you look into our system and in the curriculum you realise that the government is yet to figure out how to assess these competencies”. **CSO Representative**

To generate evidence for advocacy, “to say it is important to do this using the data.

Maybe we identify the gaps and we can use that to bring in the government and policy makers to focus on assessing some of these competencies” **CSO Representative**

Language and cultural diversity adds to the complexity of developing contextually relevant Learning Assessments.

While this challenge is evident where assessments cut across many countries, regions and continents, it is also true within countries in sub-Saharan Africa. A key informant working with the PAL Network described their experiences with two common assessment initiatives, ICAN and ICARE. While the former focuses on assessing numeracy, language was an issue in Kenya.

“We did have some back and forth mainly because in the places we worked at least there are many things in which English is spoken as well as Swahili” **CSO Representative**

Adaptations had to be made after the piloting, recalled the informant.

“In our scripts, application and in the items as well for a few things to be highlighted both in English and Kiswahili for example name of shapes” **CSO**

Representative.

Compared to ICAN, however, ICARE was said to have been more difficult to develop because it had more elements.

“ICARE was more difficult to develop [than ICAN] because language offers many more complex issues in terms of foundational learning than numeracy and this is because the tasks that involve letters, symbols in general and words and also short texts at some point but mainly letters and words, it is very difficult to do items that are really comparable across languages because the rhythm in which children learn, each of the different languages is very different” **CSO Representations**

Ensuring contextual relevance is critical for the assessment of life skills and values. ALIVE is cognisant of this but also recognises the complexity of developing common assessments that are contextually relevant and connect to the lives and experiences of learners. They have thus taken an approach that incorporates contextualisation of concepts into the assessment framework development process. For example, they did a contextualisation study in the pre-pilot phase, during which they went to five counties/districts in each of the three countries.

“In Kenya we went to the coast, we came to Nairobi, went to Mwea East, Ronggo and Narok. We went to five areas. You can see the diversity. We were looking at the agriculture zone, urban, ASAL and also the coast at Tana River and also Ronggo, which is far from the city but still agriculture and Narok, which was representing the pastoralist communities. We wanted them (adolescents) to define some of these competencies in their language and we used that information to help us develop the framework.” **CSO Representative**

Inclusive processes is key to the success of assessments. ALIVE, born out of a collaborative initiative (RELI), has continued with an intensive process of engagement, exploring the best options and ending up with a ‘hybrid’ model that combines elements of the SACMEQ/NASMLA and Uwezo models. For example, it has opted for a household-based assessment approach but decided on using teachers to administer the instruments rather than community volunteers. Using teachers together with trained data collectors is consistent with SACMEQ’s policy. The following quote captures this collaborative process utilised by ALIVE to take key design and implementation decisions on assessment of life skills and values in East Africa.

“Assessment was the key thing they all wanted to do and many meetings were held now discussing what do we mean by assessment? Is it summative? Is it formative? Is it in school or out of school? Which age group and what are we going to measure? A lot of reading happened and I know Dr. [...] also worked on a paper that compared what is happening in India and what is happening in East Africa and so all those voices came together and they settled on assessing different competencies” **CSO Representative**

Policy concerns influence the kind of questions to include in the assessments.

The policy concerns always influences the type of questions to include in the learning assessments as one informant observed.

“They just don’t come from anywhere; they are based on policy concerns like the issues of availability of instructional materials, issues of availability of teachers, issues of teacher-pupil ratio. Those are the issues we look at and those are the issues we report on so that we keep improving“ **Policymaker**

The absence of credible large scale Learning Assessments in the area of life skills and values is a policy concern. Despite values being one of four pillars in the Basic Education Curriculum Framework (2016) it is overlooked in policy documents such as the National Education Sector Strategic Plan (2018 - 2022). This notwithstanding, the engagement of ALIVE and government agencies like KNEC, KICD and TTC offer opportunities for addressing policy concerns into life skills and values assessment frameworks, both government managed and CSO initiated.

The complexity of assessing life skills may mean investing substantively in the quality of the assessors. One of the challenges of assessing life skills and values on a large scale is ensuring that the right personnel are available to administer the tests. The rudimentary training that community volunteers are given in the Uwezo model, especially when they do not have any qualifications or understanding of pedagogical principles, is inadequate for assessing life skills and values, though they may be adequate for administering the more quantitative types of assessments and tests. ALIVE, learning from the Uwezo experience, has opted for partnering with teachers training colleges and utilising teachers for assessment purpose as a way of deepening knowledge on why it’s important assess these skills.

“Getting people to assess from those TTCs will help to get assessors who feel they have a responsibility, it’s not just doing an assessment” **CSO Representative.**

In addition to reinforcing the capacity of teachers and teacher training colleges in the area of life skills and values assessments, this strategy will no doubt facilitate the uptake of the assessment findings in teaching and learning institutions and process.

However, it must be remembered that even the government-initiated assessments and tests are administered by teachers who receive orientation before going out to collect the data. Therefore, it might be prudent to go beyond engaging teachers exclusively to identifying the profile of the ideal assessor in the context of life skills and values assessments.

The results may actually be misleading.

A key informant from NAC pointed out that a majority of SACMEQ assessments of life skills have shown that the learners have a high level of proficiency in life skills. However, she recognised that these results may not reflect the actual level of understanding and practice of life skills and values by learners, as may be inferred from the quote below:

“But I think our assessment of life skills would be better if we were now to interview the learners. Interact with the learner directly. Our assessments are pen and paper. When you are talking to the learner, you are able to see whether they have those subtle life skills that they need.”

“Like self-efficacy, assertiveness, self-concept, those ones you can see if you are observing. One of the lessons, I can say that I have learnt through this or through not doing is that one would actually have the two. Both pen and paper and through observation. So that you observe the children as they do and you are able to come up with thematic areas and even more objective and more accurate way of gauging the level of proficiency of life skills of these learners” Policymaker

A measurement that cannot “discriminate”, as the coordinator of ALIVE pointed out, “is not a good measure”. With this lesson in mind, ALIVE has developed a totally different methodology to assess life skills and values. Conducting the assessment at the household level, it adopts a holistic approach testing children’s ability to apply the selected skills through use of vignettes. It also records observable behaviour.

“When you are assessing the adolescent, you have someone who has a gadget who is scoring [on a scoring rubric] and someone who is writing notes” CSO Representative

Dissemination channels and timeliness affect uptake

Engagement with stakeholders using the conventional and social media to disseminate assessment findings may get the attention of policymakers, but it may also alienate end users like teachers. Teachers expressed concern that the ‘sensational’ media reporting about poor learning outcomes provoked hostility of parents towards them, which they felt was unjustified.

a. Having a functional website is in itself no guarantee that digital copies will be accessible to all end users and other stakeholders, especially those living in adversity and away from the main urban centres. The SACMEQ reports, for example, are open access posted on the NAC portal. However, teachers complained of their inability to either access the NAC websites or download the reports because of poor internet and power connectivity.

b. **Delayed release of assessment findings may have limited impact.** Generally, in the case of multi-country assessments like SACMEQ, there is a gap between the time an assessment takes place and when the results are disseminated. This lag may be attributed to the different pace of implementation of data collection and analysis by the various participating countries.

The findings of an assessment have not informed policy. Though many of the teachers in our sample had never heard of SACMEQ, key informants pointed out that the findings of this assessment had contributed to the evolution of the MoE’s school textbook policy, which put a ceiling of two as the maximum number of pupils who could share a book.

5.0 Conclusions and Recommendations

5.1 Introduction

The main aim of this study was to explore how past Learning Assessments have been used to affect educational policy and practice in Kenya, with an emphasis on life skills and values. In this final chapter, we synthesise the findings using the specific research questions (RQ # 1- 3), and propose recommendations based on questions # 4 & 5, which we have reformulated as RQ 4. The four questions are presented in box 2.

Box 2. Research questions (RQs) explored in the study

- What are the lessons about national data-driven decision-making from past and present national and regional Learning Assessments in Kenya?
- Who are the key actors and networks within the Kenyan education system, and how do they work as far as utilisation of Learning Assessments is concerned?
- What are some of the successes, good practices, challenges, and barriers to the utilisation of Learning Assessments?
- How can we use the learnings from past and current large-scale Learning Assessment experiences to establish and strengthen a dynamic learning community in Kenya and support policymakers at the national level to integrate them into data-driven decisions to improve curriculum design and delivery?

5.2 Issues and insights

5.2.1 Lessons from Learning Assessments

RQ1: To what extent do findings of Large Scale Learning Assessments contribute to national decision-making in the education sector?

Apart from ALIVE, the LSLAs reviewed in this study have little or no focus on life skills and values. Regardless of this, there are lessons both from the processes and outcomes particularly from SACMEQ/NASMLA and Uwezo that can and do contribute to decision-making in the education sector, albeit not to the extent that they should as observed in the following pages.

The study reveals an awareness at the policy and technical levels of the importance of data-driven or evidence-based decision-making though not necessarily evidence generated only from Learning Assessments but also from other types of research. While evidence-based decision-making is perceived to be the ideal, there was a consensus that it is often overlooked in practice, especially when setting the policy agenda. Instead, politics and ‘politicking’ tend to determine which agenda gets to be on the policy table, and whether resources will be prioritised and allocated for a specific issue. ‘Politicking’ as defined in this report is differen-

tiated from ‘politics’, referring to manipulation of the policy-making process by individuals from within the system to promote their personal self-interest at the expense of the common good. Sometimes, not always, politicking is fuelled by special interest groups keen on pushing their own agendas.

The study confirmed the lack of prioritisation of life skills and values as a teaching subject in the 8-4-4 education system, which is expected to be phased out by 2027. This may be attributed to the status of life skills and values education as a non-examinable subject in the 8-4-4 curriculum, left largely to CSOs to implement through co-curricular activities such as school-based clubs. However, the CBC, which emphasises formative assessment (60% of the total marks obtained by a learner by the end of Grade Six) as opposed to summative assessment (40% of the total marks), offers an opportunity to strengthen the teaching and learning of life skills and values in Kenyan schools. This notwithstanding, challenges remain on how to effectively assess life skills and values at scale within the formal education system.

Life skills are also assessed in SACMEQ/NASMLA alongside numeracy, literacy and science. However, the high scores obtained by learners in the life skills assessment suggest a methodological weakness in the design of the tests, thereby restricting the usefulness of the results for decision-making. In fact, unlike policy briefs generated on literacy, numeracy and science, NAC has not been able to produce similar briefs on life skills based on the results of the SACMEQ/NASMLA assessments. If anything, the adoption of an exclusively ‘pen and paper’ approach is a good lesson on how not to assess life skills and values.

The household is the entry point for ALIVE, which is currently the only large scale Learning Assessment focusing exclusively on life skills and values in Kenya. This approach, adapted from Uwezo, allows inclusion of children who are outside the education system in the assessment sample and determine whether there are significant differences in their competency levels with regard to the selected life skills and the value of respect.

Though the MoE and its line institutions have previously been engaged at various stages of the ALIVE assessment process, the impact of these engagements on informing government policy and educational practices is yet not clear. However, a collaboration between ALIVE and the KNEC expanding the scope of ALIVE to assess children ages six-12 within the school is promising and expected to provide opportunities for data driven decision-making nationally.

RTI has demonstrated that scale-ups of initiatives through government systems is possible and can impact positively on the education sector. Specifically, ALIVE could learn from the experience of the Tusome programme, which was implemented by RTI and funded by USAID and DfID. Tusome targets Kiswahili and English literacy improvement in the early grades.

5.2.2 How findings of Learning Assessments are utilised

Who are the key actors and networks within the Kenyan education system, and how do they work as far as utilisation of Learning Assessments is concerned?

In Kenya, education is the mandate of the national government with the Ministry of Education responsible for policy formulation and implementation of education and training policies, standards, curricula, and examination as well as the management of all education institutions in the country among other functions.

The MoE is represented at the regional, county and sub-county levels by education directors and quality assurance officers. In addition, there are state corporations, also known as semi-autonomous government agencies (SAGAs). Of relevance to our discussion is the Kenya National Examination Council, Kenya Institute of Curriculum Development and the Teachers Service Commission, the latter being an independent commission mandated by the Constitution of Kenya 2010 to regulate all matters to do with teachers. All these are key actors involved in the development and implementation of Learning Assessments with the National Assessment Centre under KNEC being vested with the responsibility of carrying out studies under the NASMLA Framework, which was developed in 2007. The studies have been complementing public examinations (KCPE and KCSE) by assessing the performance of the school system rather than individual learners (<https://www.knec.ac.ke/nasmla/>). Micro level actors include schools, school administrations, boards of management, teachers, and parents.

The Kenyan Constitution makes public participation in policy and decision-making processes mandatory. The Education Act 2013 (article 4) stipulates cooperation, consultation and collaboration between the MoE and other state and non-state actors as a value and guiding principle. By inference, this principle applies to partnerships with civil society organisations and networks, which are very vibrant in Kenya. Of special note in the present context is RELI - the Regional Education Learning Initiative which gave birth to ALIVE, and RTI (Research Triangle International), which was involved in the piloting and implementation of EGRA and EGMA in Kenya.

From the analysis of our data, four models of engagement emerge highlighting the working modalities as far as utilisation of the findings of Learning Assessments are concerned, namely:

a. **The silo or closed door model.** A case in point is NAC, which packages the assessment findings as policy briefs and disseminates to relevant MoE directorates and State corporations for their action without involving other partners, public or private.

b. **The policy and county dialogue forum model.** These are used to engage national and devolved level stakeholders in the dissemination process. In the county forums, effort is made to package findings of relevance to the particular county where the event is taking place. This includes focusing on the areas that need improvement. It is assumed that counties and schools will utilise the findings for improving the quality of teaching and learning in their areas of

jurisdiction. The policy and county dialogue forum model has been used with some success by both the government and CSOs.

c. **Collaborative model.** This is more commonly used by CSOs best exemplified by RELI. RELI, which has more than 70 member organisations in East Africa, co-created ALIVE building on research findings including that of a scoping study published in 2019, which was funded by a funding partner, Echidna Giving. The initial process comprised building consensus around the purpose and objectives as well as prioritisation of the life skills and values to be assessed. Since then, the assessment framework design has evolved with active inputs from RELI members and targeted government directorates and institutions, using convenings and ‘learnshops’ to build member capacity on assessment related issues.

d. **Pilot- evaluate - scale up model.** This model has been used successfully by RTI to scale up EGMA and EGRA. The initial EGRA pilot was jointly developed and implemented with the Aga Khan Foundation with support from USAID. The USAID has a strong partnership with the Government of Kenya, which facilitated taking the pilot to scale. ALIVE has also invested in a pilot and has begun rolling out the initiative in selected counties in Kenya and the other two East African countries, but is yet to be evaluated.

5.2.3 Successes, good practices, challenges and barriers

What are some of the successes, good practices, challenges, and barriers to the utilisation of Learning Assessments?

Successes and good practices

The Learning Assessments reviewed in this report have had some successes. For example, SACMEQ conceptualised as a planning tool, has contributed to quality improvement through limiting each textbook shared to two learners. It also facilitated the institutionalisation of gender sensitive indicators, placing it on the MoE’s agenda as measures of access and quality. Uwezo, with its focus on citizen’s action, successfully drew public attention to the poor quality of learning and learning outcomes. There are indications that EGRA results were used to improve the curriculum delivery capacity of teachers by providing instructional support for better reading outcomes among lower grade learners.

Some of the good practices embedded in the various Learning Assessments have already been alluded to in the previous paragraphs. These include:

- Packaging of SACMEQ findings in ways appropriate to target stakeholder groups with the aim of facilitating positive changes in policy and practice.
- County forums as effective channels of dissemination of SACMEQ findings and stakeholder engagement.
- The mobilisation of RELI members in Kenya, Tanzania and Uganda to take collaborative action and co-create the ALIVE initiative to assess selected life skills and values.

- Uwezo’s use of the assessment process to educate parents on their role in improving children’s learning. This included the instant feedback strategy through which parents were made aware of their children’s proficiency in literacy and numeracy. The other strategy was to leave posters with key messages in the households where the assessment was conducted. Both these strategies have been adapted by ADAPT.

Similarly, testing at the household level enables both Uwezo and ALIVE to capture the experiences of out of school children. Uwezo’s focus on citizen’s action, successfully drew public attention to the poor quality of learning and learning outcomes through the slogan ‘learners are in school but not learning’ and giving evidence on why they are not learning. Several interventions have emerged based on this realisation. Parents have also been sensitised on their role in improving learning. Innovations such as accelerated learning approaches and remediation implemented by various actors have continued to be informed by UWEZO data. Anecdotal evidence also suggests that other interventions within the Universal Primary Education (UPE) strategy such as school feeding programs have also been influenced by UWEZO data.

ALIVE uses innovative strategies to assess life skills and values, moving away from self-rating scales to testing learners’ skills to problem solve and think critically through the use of vignettes, task performance and observation of behaviour. Among the key hallmarks of this initiative is,

- a. The engagement of diverse stakeholders in the assessment processes at critical junctures thereby strengthening ownership of the process and outcomes.
- b. Contextualisation of the assessment framework
- c. Partnership with TTCs and engagement with teachers to administer assessments.

Barriers and challenges to utilising assessment findings: Despite the successes and good practices, the study revealed barriers to the uptake of the findings of large scale assessments by policymakers, and their utilisation to improve the quality of the teaching and learning processes and outcomes. While some of these barriers apply equally to assessments of academic subjects (numeracy, literacy and the sciences) and life skills and values, others relate specifically to the measurement of the latter.

Low awareness of Learning Assessments among practitioners: We found relatively low awareness of the assessment findings among the practitioners (teachers) and mid-level officers (county/sub-county level) as compared to the technicians and policymakers at the MoE headquarters. The dissemination channels used were not always adequate or appropriate. There were issues of time lags in the communication of results, especially in the case of regional assessments like SACMEQ. While Uwezo was able to use both the conventional media (radio and television) and the social media to create a buzz around the assessment findings, the strategy had the unintended consequence of alienating some teachers who perceived the messaging to be exaggerated and hostile towards them.

Limited capacities on assessments: There were also challenges relating to the lack of, or inadequate assessment capacity at multiple levels, i.e. at the personnel, teacher and policy levels. Our findings draw attention to critical capacity gaps in personnel required to administer and manage the assessment process effectively. Administering tests focusing on life skills and values require more advanced skills sets than the assessment of literacy and numeracy. Many of the teachers in our sample revealed poor understanding of the purpose of the assessments and the methodologies used. At the MoE level, there appears to be limited capacity in research and data translation among the technical officers and policymakers to go beyond the pre-packaged policy briefs and critically analyse and engage with the data. There is a strong insider recognition that most officers do not have the capacity to interpret data and knowledge in ways that makes sense in their work, contributing to the low utilisation of the assessment findings.

Weak institutionalisation of research: Linked to the above, is the issue of institutionalisation of research. We found there was no department or even a unit within the Directorate of Policy dedicated to research though MoE insiders talked of plans to establish a research coordination mechanism or an evidence repository that would provide a platform for analysis, the synthesis of those findings and link this analysis to policymaking and see what it is working, what's not working. It is expected that if and when established, this would go a long way to address the gap.

A lack of uniform understanding of life skills and values: The measurement of life skills and values has been challenging globally, especially on a large scale. The subject matter is complex -- life skills and values are intangible and the same concepts may be defined differently from one place to another, with nuanced differences even within the same geographical localities, same ethnicities and religions. The value of respect, for example, is widely perceived to be 'fear' (Wama-hiu, 2015) but for others, it may have to do with "a feeling of deep admiration for someone or something elicited by their abilities, qualities, or achievements" (<https://www.centregrove.k12.in.us/Page/11273#>). Respect for someone may be culturally defined and expressed based on one's demographic profile including age, sex, gender, profession, or social status or a combination of these characteristics. Responding to this complexity can be a lengthy and expensive exercise, posing a significant barrier in designing effective large scale assessments that are contextual and relevant. It may also lead to challenges in the administration of the assessments and subsequent delays in the utilisation of the findings by stakeholders across a wide spectrum of contexts.

High-stake examination culture within the education systems: With the ethos of schools derived from examination cultures, life skills and values teaching continue to be de-emphasised by both parents and teachers. National examinations seem to be a more acceptable benchmark for assessing education quality rather than Learning Assessments. Equally at the policy level, beyond the rhetoric, there is little demonstrated commitment to implement the life skills and values component of the curriculum, let alone to measure the outcomes and feedback the findings to efforts aimed at quality improvement of the teaching- learning process and out-

comes.

Negative attitudes towards data and evidence:

The analysis of the data gathering process throws a spotlight on attitudes and mindsets, not only of parents and teachers, but also the policy and management levels. Negative attitudes and mind-sets can be insidious, not always obvious until the damage has been done. It may be reflected in unexplained delays in approvals even when it is to disseminate, low prioritisation of resources for life skills and values research, assessments and dissemination

Compartmentalised mind-sets. The study found a weak link between the ministry and SAGAs, and sometimes even within the different directorates within the MoE. This has resulted in a reluctance to work across silos (government departments and agencies). This has also created stumbling blocks in engaging effectively with the civil society organisations and groups as partners and collaborators who bring to the table creativity and commitment. Ultimately, valuable resources are lost (financial and otherwise) through duplication of efforts and exclusion.

5.3 Recommendations

Box 3. Utilising findings - the voice of a teacher

“What I would like to say is that after the findings and the report maybe you, people who are collecting this information or those who are concerned should come to schools and tell us what you recommend; what we should do to improve learning and the changes that we can make Then give us copies of the reports with that information.” (Discussant, FGD, Primary School, Kiambu)

The recommendations presented in this section address the reformulated RQ# 4, focusing on challenges identified through this study and the validation of findings.

RQ #4: How can we use the learnings from past and current large-scale Learning Assessment experiences to establish and strengthen a dynamic learning community in Kenya and support policymakers at the national level to integrate them into data-driven decisions to improve curriculum design and delivery?

Make judicious investments by eliminating duplication: There is value in first assessing the availability and credibility of what’s already been done. Tools like evidence maps and systematic reviews have become vital in facilitating better use of the available evidence before additional funding and commissioning. This is particularly a valuable approach given the challenges of developing assessments for measuring 21st Century skills. Some of the huge investments as demonstrated by ALIVE have included engagement of international resource persons. In addition, evidence gathered indicates that it takes a lot of time to develop accurate and context-specific assessment tools as noted by ALIVE, RTI and the NASMLA coordinators. Given these difficulties, collaborative efforts are needed as is the buy- in of State agencies. This will ensure that the huge investments pay maximum dividends through uptake of assessment outcomes.

Customise the packaging of products: For assessment results to have wide utilisation, the producers of such knowledge need to be aware of the different consumers and package the research outputs in a variety of forms and styles. **Policy briefs** and issue papers should be targeted at policymakers, programmers and issue advocates, while blogs, short media analytical pieces and case studies would be most suited to non-technical audiences like parents and students.

Teachers may require less technical but practical products that have real value for application in informing classroom instruction and teacher behaviour. This may include clarifying for the teachers and the stakeholders the implications of the various assessments, how they may be applied and to what effect. Already, the National Assessments Centre develops policy briefs for different agencies while ALIVE has used research findings on the contribution of parents in nurturing life skills and based on this developed calendars and checklists for parents.

- Replicate, adapt and expand the use of good practices in dissemination and feedback processes. Build on learning from identified good practices in engaging diverse stakeholders and disseminating findings that provide opportunities for feedback looping. The Uwezo and ALIVE instant feedback to parents and the NAC county level dialogues are examples of effective disseminating and looping practices. Community-based champions might be used to promote utilisation of assessments results by schools and government ministries.
- Revitalise government websites and platforms that are used in accessing the reports by teachers and other end-users. The existing sites are not friendly, have a poor user interface, are not reliable or up to date. Teachers recalled the challenges in accessing assessment reports from some of these websites. Investing in efficient, user-friendly websites would reduce costs incurred in printing and distribution to all schools in the country.
- Develop a culture of feedback to stakeholders participating in the assessments and related research. Not only will this strengthen a community of practice but will also foster credibility in the research and assessment processes. It will further encourage uptake of the findings. (Refer to Box 3 highlight the request from a teacher participating is a FGD)
- Institutionalise utilisation of assessment results through sector-wide planning, dissemination and feedback loops. Integration of strategies will require dismantling silos and compartmentalised thinking about assessments and the use of results. Dismantling silos require mind-set change and willingness of the MoE, relevant state agencies and other stakeholders (CSOs and researchers) to consult and collaborate with dignity and mutual respect.
- Institutionalise participatory action research in schools on life skills and values. This will not only require strengthening the capacity of teachers on action research among teachers through in-service workshops but for sustainability purposes, mainstreaming it into the teacher education curriculum. It will also entail sensitising school administrators and BoMs to provide the space on the timetable for teachers to undertake the action research and apply the findings to improve the quality of teaching and learning life skills and values.
- Harness expertise from SACMEQ and ALIVE to mainstream life skills and values into school-based assessments. This may take the form of joint forums to share ideas on how best to integrate life skills measurements into the SACMEQ/NASMLA tests, and CBC assessments.

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Annexes

Annex 1: List of institutions consulted

Government

I Ministry of Education and Semi Autonomous Government Agencies (SAGAs), Government of Kenya	
	Institution
1.	Directorate of Policy, Partnerships and East African Affairs
2	Directorate of Special Needs Education
4	Regional Directorate of Education, Nairobi
5	Regional Directorate of Education, Central
6	Kenya Education Management Institute
7	Kenya Institute of Special Education
8	Kenya Institute of Curriculum Development
9	Kenya National Examinations Council
10	County/Sub-county Directorate of Education, Nairobi
11	County/Sub-county Directorate of Education, Kiambu
12	Kenya National Commission for UNESCO (KNATCOM)
Multilateral and Bilateral Agencies	
1	UNICEF Education Section
2	USAID Youth Participation
Civil Society Organisations/Initiatives	
1	Research Triangle International (RTI)
2	PAL Network
3	Zizi Afrique
4	ALIVE
5	USAWA Agenda
<i>Individual experts (formerly MoE with post MoE experience with diverse national and international organisations working on education and development issues including education policy)</i>	
1	Warue Maryrose Kariuki
2	Charles Mwaniki
3	Dr Silvester Mulambe

Annex 2: Select Case Studies of Influential LSLAs

Case #1: SACMEQ

Purpose and Objectives

The purpose of the Southern Africa Consortium for Measuring Education Quality (SACMEQ) currently known as SEACMEQ is to undertake educational policy research for decision-makers. Specifically, it seeks to

Assess the performance levels of learners and teachers in areas of literacy and numeracy.

Provide educational officials and researchers with training in the technical skills required to monitor, evaluate, and compare the general conditions of schooling and the quality of basic education

Generate information that can be used by decision-makers to formulate plans for

improving the quality of education.

Activities and Geographical Scope

Its activities include project design, training, computer-based data analyses, data archive production, and dissemination of research results across 15 member countries of East and Southern Africa regions. It focuses on assessing the learning achievement of grade 6 learners, and has been administered at 5-6 year intervals since 1995.

Key Elements

It conducts school-based sample surveys, assessing both teachers and students. However, teachers are assessed separately from students. All of the selected teachers are asked to sit in one room to complete a teacher booklet. The teacher booklet consists of four parts: background information, health knowledge, reading and mathematics.

In SACMEQ, paper-based instruments are administered by trained data collectors who may be retired teachers or employees of the ministries of education.

The data collection process is guided by two detailed manuals - one for national research coordinators who oversee the national implementation of SACMEQ, and the other for data collectors which details every step that has to be taken during assessment administration.

All the SACMEQ reports (policy brief and a detailed country report) are publicly available on the SACMEQ website. Results are disseminated through country forums involving different groups of stakeholders, ranging from high-level policy makers and senior ministry officials to donor agencies and other interested parties.

Case #2: Uwezo Learning Assessment

Purpose and Objectives

The main purpose of Uwezo is to contribute to the improvement of the quality of education through the generation of credible data that stimulates policy dialogues and drives educational reforms and improvements. Its specific objectives include:

1. To get reliable, comprehensive estimates of the actual competencies in literacy and numeracy of children in target countries
2. To measure change in the competencies of children generalized at district, national and regional levels
3. To create awareness among citizens on learning outcomes at national and sub-national levels
4. To promote evidence-based policy

Activities and Geographical Scope

This is a regional assessment undertaken in Kenya, Tanzania and Uganda in every census district. Each country independently conducts its own survey and reporting, targeting children between the ages of six and 16 at the household level. One primary school in each village is also included in the sample, which is selected randomly. Data is dis-aggregated by sex, age groups, geographic location (urban and

rural; districts), and sociolect-economic status of the household.

Key Elements

First implemented in 2009, in Kenya Uwezo tests the target children on Grade Two work focusing on reading and comprehension in English and Kiswahili, and basic operation in numeracy.

Instant feedback, which is an integral part of the Uwezo multimedia communication strategy, is given to the parent or guardian on the learning levels of their child. However, decisions on what course to take is left to parents and guardians

Other channels used include printed national reports in English and Kiswahili launched in a national conference and communicated through newspapers, radio talk shows, and TV adverts and news.

To give visibility to the survey and its results, the host organisations in each country develop documentaries narrating the Uwezo process. Uwezo's visibility has been enhanced through use of various social media platforms.

Additionally, Uwezo distributes materials reproducing the tests for self-administration, either using flyers or printing the tests in the inside cover of exercise books.

It utilises community volunteers to administer the tests. They are recruited from partner organisations that have a local presence. The volunteers are not required to be focused on education in their work, but must have an interest in improving education.

Volunteers are trained using a cascade model; master trainers are first trained by personnel from the Uwezo regional office, they then train the district coordinators who in turn train the volunteers.

About the Consortium

Consortium Lead: The Global e-Schools and Communities Initiative (GESCI) is an international non-profit organisation founded on the recommendation of the United Nations Task Force on Information Communication Technology (ICT). GESCI was established in 2003 at the first World Summit on the Information Society. GESCI works with governments and partners in providing strategic support to develop and implement models of good ICT-based practice for high-quality education and training and to build effective leadership abilities in ICT and Knowledge Society development among government officials in the developing world. GESCI also works to contribute towards building a knowledge society for all based on the principles of equal opportunities, inclusiveness, empowerment, accountability and sustainability. GESCI's role in this consortium is the overall management and implementation of the project. This will include but not be limited to leading all aspects of project coordination, knowledge generation, knowledge mobilisation, coordinating capacity building, the learning agenda and advocacy particularly in Kenya and Tanzania where it has physical presence and has built social capital within the education sector.

Partner One: College of Education and External Studies, Makerere University (CEES), Uganda. As the oldest and one of the largest teacher training facility in the East African Community (EAC), the CEES is well placed to collaborate and advise government and has great resonance with educators, community workers, administrators, inspectors of schools, curriculum designers and community outreach implementers to work at all levels and forms of the education system. It also focuses on the provision of adult, continuing, community, open, distance and e-learning. The college is respected as a centre of excellence in the development, research and application of professional educational approaches in response to national and global needs. The CEES leads project implementation in Uganda.

Partner Two: The University of Notre Dame's Global Centre for the Development of the Whole Child (GC-DWC) collaborates with researchers and practitioners around the world to ensure the wellbeing—physical, emotional, social, and cognitive—of children and adolescents in low-resource and conflict-affected settings. Using an innovative whole child development approach tailored to context-specific needs, GC-DWC translates research into timely and thoughtful action, adapts research tools to improve the development of learning programs and policies, and activates systems (families, schools, communities) to ensure that children and adolescents can thrive. GC-DWC has previously led global measurement and learning consortia and is currently part of global working groups around social and emotional learning and skills development for children and adolescents. As the global knowledge leads in this project, GC-DWC leads in knowledge translation, capacity building components.

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