

Adapting Scenario Based Assessments for School Based Assessment of 21st Century Skills: The ALiVE Experience

Samuel M. Mutweleli 41st annual conference for AEAA Skylight Hotel, 25th -29th August 2025 Addis Ababa, Ethiopia



Background to the Presentation

capacity of stakeholder s to develop measureme nt

Limited
assessment
frameworks to
assess learning
[life skills and
values]

Curriculum shifts to include life skills, without clarity on how to

measure

Kenya

 New curriculum integrated 8 values and 7 core skills

Uganda

New curriculum for secondary level

 includes 21st century
 competencies

Tanzania

 Tazania (Mainland) and Tanzania (Zanzibar) are rolling competencebased curriculum for primary schools

Limited context specific tools for measuring life skills

The idea of ALiVE

Limited assessment frameworks to track learning

Assessment much needed in Africa

Need to measure non-cognitive skills values and life skills

Existing SEL measurement by 2020

Existence of summative assessment – high stake examinations.

Inability to diagnose what is happening – are children learning?

Birth of Uwezo learning assessment as a tool for providing diagnostic assessments of the system

Development of contextualized learning assessment tools

Limited context specific frameworks for measuring life skills.

Curriculum shifts to include life skills, without clarity on how to measure.

Existing tools were developed for western contexts and transferred.

Hardly any capacities remained in Africa.

Most used self- and other-rating scales, which we considered less appropriate for our context

From heavy focus on cognitive assessment in literacy and numeracy

..to include frameworks for measuring VAL



Problem we are Solving Problem we are Solving

- Competency-based curricula have been adopted, but implementation gaps persist.
- Millions of learners, complete school without essential life skills and values.
- Academic reforms exist but life skills are not fully integrated
- Gaps in teacher preparation, parental involvement, and system-wide accountability.
- Risk of growing inequities and unemployability



Assessment of 21st Century Skills

- Assessment of twenty-first century skills continues to challenge measurement experts in education.
- Scenario-Based Assessment (SBA), a strategy used in the ALiVE programme, offers some benefits for the assessment of these skills.
- In Kenya, Tanzania, and Uganda, education is undergoing reform to include competencies and values
- These evolving frameworks necessitate new forms of assessment



Characteristics of SBA Tasks

- SBA tasks are grounded in authentic, contextualized settings that simulate real-world problems
- They emphasise on problem-solving, requiring leaners to analyse information, identify issues, and make reasoned decisions
- The tasks are typically open-ended and complex, which supports the development of higher order thinking skills
- The performance-based nature of these tasks means that assessment focuses on how well leaners can perform in context, rather than simply recalling isolated facts



ALiVE Sample: Phase I (2020-2023)

- The sampling frame was derived from the Population and Housing Census' frames for Kenya, Tanzania Mainland, Tanzania Zanzibar, and Uganda.
- A multi-stage sampling approach was used to select households and adolescents for the study.
- A total of 45,442 in-school and out-of-school adolescent boys and girls from ages 13 to 17 from 35,720 households, 1,991 enumeration areas, and 85 districts/counties were assessed.

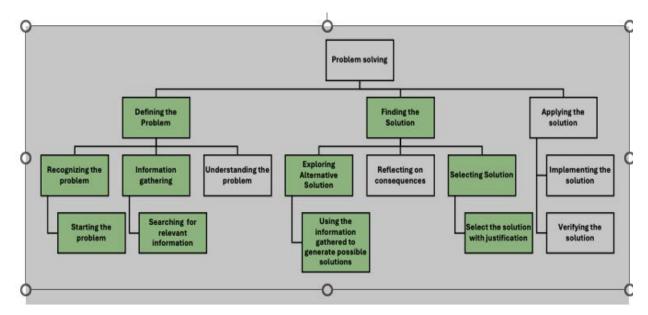


Use of Scenario-Based Assessment in ALIVE

 The construction of the scenarios was informed by the hypothesized structures of each life skill and value, as defined through specific dimensions and associated assessment frameworks.

The case of Problem Solving:

- The adopted problem-solving framework identified eight subskills grouped under three overarching dimensions.
- The operationalized assessment framework focused on four of these subskills, distributed across two dimensions





Illustrative task identifying subskills targeted (HBA)

Scenario: You send your seven-year-old sister to buy salt from the nearby shop. After 5 hours, your younger sister is not yet back. Your sister does not usually take all that time.

| Item | Sub-skill |
|---|---------------------------------|
| Can you explain how this is a problem? OR can you explain how this is not a problem?) | Recognizing the problem |
| If you are asked to solve this problem, what else do you need to know about it? | Information gathering |
| Suggest some ways to solve this problem? | Exploring alternative solutions |
| Of the suggested ways of solving this problem, what is the best and why? | Selecting the solution |



Development of Scenario-Based Tasks

Aassessment design process involved 5 stages:

- defining and refining the target skills and values
- determining the assessment scope
- drafting the assessment frameworks
- generating task ideas
- designing scenarios and scoring criteria.

A significant step in this process was paneling which served as a quality control mechanism.

Sample items on the Panelling checklist

Does the item test the underlying construct that is the focus?

Is the item at the right level in terms of the expected ages of the test-takers?

Is the form, presentation, and language of the item coherent? Unambiguous? Clear?

Is there reasonably a possibility that responses can be given over a range of proficiencies?

Does the item breach ethical, cultural or other sensitivities?

(Source, Mutweleli et al, 2024)



Challenges of Scenario Based Assessment Tasks



Simpler scenarios may not elicit less visible, yet important, skills.



Aattributing responses solely to skill level overlooks the complexity of behavior, which is several factors. This challenges the construct validity of SBA, requiring further replication to confirm its claims.



SBA development is resource-intensive and trade-offs had to be made to ensure the assessment was short and



The unfamiliarity of SBA for adolescents, coupled with cognitive demands and time constraints may have affected their performance



Based on the experience of using SBA in HBA, it is imperative to note that;

..to effectively implement SBA in classrooms, teachers should adopt a series of strategic practices rooted in both pedagogical clarity and contextual relevance

- 1. It is essential to start with clear competency frameworks, ensuring that the design of scenarios is guided by a structured understanding of the skill or value being assessed.
- 2. Scenarios must also be aligned with specific learning objectives so that they target the intended subskills and support authentic, measurable learning outcomes
- 3. context matters using familiar, everyday environments such as the home, school, or community can enhance the relevance of assessments, increasing leaner engagement and supporting more authentic demonstrations of learning
- 4. teachers should design with purpose and practicality, setting realistic expectations for what can be assessed in a classroom setting and clearly communicating the scope of each task



Illustrative SBA task identifying PS subskills targeted-assessing both skill and curriculum content(science)

Scenario: There is an outbreak of water-borne disease in Tamu school

| Item | Sub-skill |
|--|---------------------------------|
| Why is this a problem? | Recognizing the problem |
| What information do you need to know about this problem? | Information gathering |
| List different ways of preventing future outbreak | Exploring alternative solutions |
| Of the different ways you have listed of solving the problem, which one is the best and why? | Selecting the solution |





Website https://alive-reli.org/

Action for Life Skills and Values in East Africa -ALiVE

