LEARNSHOP 3

On 29th October 2020, Prof. Esther Care delivered a webinar on applying *A Tested Method to Characterize Transferable Competences-Experience from the Optimizing Assessment For All Projects*. In the webinar, Prof. Care took the team through the OAA project-Characteristics of the competencies, methods and outcomes, the nature of the assessment tools, and the challenges and solutions. The attendees also gave inputs on the challenges anticipated in the ALiVE project. The webinar was attended by over 50 participants. Here is a summary of the webinar:

1.0 Introduction:

Optimizing Assessment for All (OAA) is a project within the Global Economy and Development Program at the Brookings Institution. The aim of OAA is to support countries to improve the assessment, teaching, and learning of 21st century skills (21CS). Facilitated by the Network on Education Quality Monitoring in the Asia-Pacific (NEQMAP) at UNESCO Bangkok; and the Teaching and Learning Educators’ Network for Transformation (TALENT) at UNESCO Dakar, OAA identified a group of 3 countries in each of Asia and Africa to work intensively over two years to design, administer, and use the results of classroom-based assessments of 21CS. These countries have worked collaboratively within their regions and share their progress regularly with other countries through their regional networks - NEQMAP and TALENT. OAA is aligned with the United Nations Sustainable Development Goal (SDG) 4 – to ensure inclusive and equitable quality education for all children. The emphasis of OAA is on developing existing capacity and resources, building additional capacity as needed, and changing mindsets to cultivate and support the development of assessment expertise associated with 21CS within the participating countries and regions.

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**Who is Esther Care: Research Portfolio**

1. UIS Pilot Coordinator, SDG 4.7.6
2. Measuring Non-Cognitive Learning in Indonesia
3. Assessment and Education Reform, Myanmar
4. Life Skills and Citizenship Education
5. Optimizing Assessment for All
6. Skills for a Changing World
7. Assessment of Generalisable Skills
8. Assessment and Teaching of 21st Century Skills

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The OAA aimed at developing assessment tasks for 21st-century skills that teachers could use as a model for setting their own task for classroom use and integration. Initially, the study carried out two mini studies in Asia and Africa (9-countries in Asia and 9 countries in Africa) aimed at determining the status quo as far as 21st-century skills-Cognitive and social skills. It is from this mini-study that they zeroed down to 6 countries 3 in Africa (Gambia, Zambia and DRC) and 3 in Asia.

### 2.1 Project characteristic

**Development approaches**
- The project model was for the capacity building where they assumed that everybody had something to learn and no one had monopoly of expertise for the project design or implementation.

**Grounded Approach**
- Each country had a core team; such as Educational psychologists, assessment experts, curriculum experts but most important teachers. The contribution from teachers was very pivotal to the success of the project since they are the ones who interact directly with the students/learners and the curricula.

**Collaboration**
- Countries were expected to work together to grow and build their capacity in the assessment of 21st-century skills. In particular, each was expected to develop assessment items share with teams from other countries for feedback-This was done through virtual platforms, and in workshops.

**Teachers**
- Teachers-The involvement of teachers in the whole process was critical and teachers were the greatest beneficiaries of the creativity of teams in other countries.

### 2.2 Skills for consideration

The OAA project focused on three skills:

- Critical thinking
- Collaboration
- Problem Solving

It is worth noting that the skills cannot be taught in a vacuum and just like the assessment, the project embedded them in mathematics, science and social science.

### 2.3 Assumptions about 21st century or transferable skills

i) Skills are enablers-They enable young people to function effectively and efficiently.

ii) Skills are teachable-If not true why then have it in the curriculum.

iii) Skills progress from simple to more sophisticated- The increasing skill levels are qualitatively different from each other. This means that the nature of the skills changes as it becomes more sophisticated. Student behaviors can indicate where they are in their learning trajectory.

iv) Nature of the skills dictate how they can be taught and assessed- skills are not knowledge, they are competencies hence no memorization, retrieval, storage etc.

v) A complex skill must be deconstructed to: -understand its nature -assess it -teach it.

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2 Disclaimer for ALIVE: Unlike ALiVE which targets adolescent in and out of school the OAA project was actualized for learners in formal education; hence the need to be objective as we try to adapt some of the OAA frameworks.
vi) Skills should be transferable to different situations

### 2.4 Process for describing skills’ nature and structure

1) Review the literature- Use the knowledge that exists.
2) Use multi-expert group (teachers, assessment experts and curriculum developers) generate hypotheses- Brainstorm about each competence.
3) Apply hypothetical structure to learning or assessment targets to ensure fit.
4) Finalise skills structure.

### 3.0 ASSESSMENT

#### 3.1 Key point to Focus during the assessment

a) The goal matter- What is the goal? what do we want to see the student able to do? The assessment must target that goal.

b) Proficiency level of students- What is the level of problem-solving we expect from the students- what is the justification of our expectations?

c) Nature of the targeted construct - Understand the nature as it is not tangible, we need to understand what is inside.

d) The process, not the product- For example in problem-solving one should not be interested in the solution but the pathway that people take to get to the solution. One should also be interested in the different resources that help young people to understand how to go about doing something not how to do one thing.

#### 3.2 Generic process for assessment

- Identify the competencies
- Describe their nature and structure
- Describe skills progression in actualisable terms
- Contextualise within target area
- Identify what aspects are assessable
- Develop assessment items
- ‘Think aloud’ checking
- Pilots
- Checking against verifiable outcome

#### 3.3 What to consider while creating assessment

1) Identify learning outcomes - What do you want to assess? Which skill(s)?
2) Identify criteria/behaviors - What criteria will you use to identify whether a student is demonstrating that skill? - What does different levels of that skill look like?
3) Decide on the format and context of the task - What is it you want students to do, and produce? What resources will they need? In what context, or domain will you situate the skill?
4) Develop task and scoring guide - Will you use rubrics to score? Or another format? As you test the task with students you may need to refine
3.4 Approach to creation of assessment tasks and items

The approach relies on knowing the nature and structure of the targeted complex skill. It entails:

a) Re-visioning—Use of traditional tasks and improving/tweaking them to align with the skills.
b) Component processes—this involves deconstruction of the skills, identifying the subcomponents and developing assessment tasks to target those subskills rather than the whole skills, thus making tasks revolving around the skills processes.
c) Template—Use of components of the skills/sub-skills.

4.0 OAA Framework 2020

<table>
<thead>
<tr>
<th>a) Problem Solving</th>
<th>b) Collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill components</td>
<td>Skills components</td>
</tr>
<tr>
<td>Sub-components</td>
<td>Subcomponents</td>
</tr>
<tr>
<td>Information gathering</td>
<td>Participation</td>
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<tr>
<td>Ask question-related to the problem</td>
<td>Take responsibility</td>
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<td>Organize information</td>
<td>Share</td>
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<tr>
<td>Classify</td>
<td>Take turns</td>
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<tr>
<td>Analyse (verify, discriminate, compare and describe)</td>
<td>Engagement</td>
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<tr>
<td>Planning a solution</td>
<td>Communication</td>
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<tr>
<td>Generate ideas options and hypothesis</td>
<td>Receptive</td>
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<tr>
<td>Hypothesis</td>
<td>Expressive</td>
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<td>Consider and compare options</td>
<td>Negotiation</td>
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<td>Develop a plan</td>
<td>Compromise</td>
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<tr>
<td>Discriminate</td>
<td>Perspective</td>
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<tr>
<td>Identify relations</td>
<td>Decision Making</td>
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<tr>
<td>Predict</td>
<td>Analysis</td>
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<tr>
<td>Managing information</td>
<td>Evaluation</td>
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<tr>
<td>Follow a plan</td>
<td>Plan</td>
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<tr>
<td>Compare the output with the plan</td>
<td>Skills components</td>
</tr>
<tr>
<td>Compare evidence with the prediction</td>
<td>Subcomponents</td>
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<tr>
<td>Check logic flow</td>
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<tr>
<td>Justify the process</td>
<td></td>
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<tr>
<td>Explain</td>
<td></td>
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<tr>
<td>Synthesis</td>
<td>Summarize</td>
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</tbody>
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5.0 Findings From OAA

After 18 months of working with tasks and 200 students from each country at the classroom level, we concluded that:

1) In terms of literacy many students lack the capacity to express themselves. This does not imply that they lack comprehension in relation to the skills.
2) Teachers and students assumed there must be answers but for competences, there is nothing of that sort.
3) Cultural norms associated with the skills - In a normal classroom the students are used to raising of hands to capture the teacher's attention. However, for the competences this ought not to be the case.

4) Interaction with teachers - In some communities, it is very difficult for students to work closely with teachers due to cultural boundaries.

### 6.0 Challenges and solutions Challenges

1. The assumption that there is an accepted approach
   Adoption of others’ solutions for example frameworks; No country is better than others.
   Countries should accept each other’s framework. Countries should be confident in using their framework in line with their culture.

2. Scoring - Scoring is difficult as there are correct answers to multiple solutions.

3. Assumption that there are agreed and known performance expectations/solutions.

4. Confidence in own judgment to decide on relevant approach. Generate own solutions for example frameworks.

5. Commitment to skills, structures, definitions and descriptions upon which rubrics will be based for scoring.

6. Consideration of how to establish performance expectations and set assessments accordingly.

### 7.0 ALiVE: Learning Points

<table>
<thead>
<tr>
<th>Area</th>
<th>Aspects</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing Proficiency level</td>
<td>Language variation.</td>
<td>Translate to different languages.</td>
</tr>
<tr>
<td>Harmonizing across different countries</td>
<td>We have different cultures and our curriculums are different. We also have different policy interests.</td>
<td>Break down the skills and see what is common across the three-country.</td>
</tr>
<tr>
<td>Resources for assessing at scale</td>
<td>To capture the attention of the key stakeholders especially government there is a need to assess in large scale. This would also be useful for advocacy.</td>
<td></td>
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<tr>
<td>Cultural and individual differences</td>
<td>Comparability</td>
<td>Check for common ground and develop tools for what is common. Assess the skills and not the language.</td>
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<tr>
<td>Household assessment</td>
<td></td>
<td>Well thought out tasks to cater for out of school.</td>
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