OPTIMIZING ASSESSMENT FOR ALL

Framework for understanding project goals and scope

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BROOKINGS

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Optimizing Assessment for All (OAA) is a project of the Center for Universal Education at the Brookings Institution. The aim of OAA is to support countries to improve the assessment, teaching, and learning of 21st century skills through increasing assessment literacy among regional and national education stakeholders; focusing on the constructive use of assessment in education; and developing new methods for assessing 21st century skills.

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INTRODUCTION

In a world of rapid advancement and change, people and societies need a new mixture of skills to thrive. It is no longer accepted that education devoted mainly to the memorization of facts will prepare people to be thoughtful, productive, and engaged citizens. Rather, people of all ages need a broad set of skills, including cognitive, social, and technological, to evaluate and apply knowledge in ways that meet the new demands of a changing social and economic landscape. These skills, such as critical thinking, problem solving, collaboration, information literacy, and communication, among others, are often broadly referred to as 21st century skills (21CS) or transversal competencies (TVC).

Assessments are used for many purposes in the education system (Vista, Kim, & Care, 2018), with the overall aim “to educate and improve student performance, not merely to audit it” (Wiggins, 1998, p. 7). The Sustainable Development Goal for education (SDG 4) places an increased focus on learning outcomes. But, despite increasing emphasis globally on measuring learning—with more than 170 countries participating in some type of national, regional, or international assessment—results are not often used in ways that promote student learning (Best et al., 2013). Moreover, countries around the world are including 21CS in their national education goals and policies, signaling their commitment to addressing the changing needs of their learners (Care, 2018). However, countries are faced with challenges in how to implement these policies due to disconnects between different parts of the education systems; lack of understanding on how teaching and learning 21CS looks in the classroom; and limited measurement expertise in the area of 21CS assessment.

"Transforming these [21CS] skills into real classroom practices remains a major challenge for teachers in The Gambia. Their intrinsic value is recognized by all teachers as a contributing factor to promote quality education, but the lack of knowing how to teach and assess them limit classroom activities to only routine cognitive tasks."

Mr. Momodou Jeng
Director, Science and Technology Education and In-service Training Unit, The Gambia

Between December 2017 and April 2020, the Optimizing Assessment for All (OAA) project will address these challenges by strengthening education systems' capacity to integrate 21CS into their teaching and learning, using assessment as a lever for changing classroom practices and building that capacity. In this project, 21CS are defined as domain-general skills (cutting across multiple domains of knowledge), which are becoming increasingly important in our 21st century world and its diverse work environments (For more information about how skills are defined in OAA, please see Appendix A). A central project objective has been shifting attitudes toward the constructive use of assessment to support learning for all. In addition, the project has been based on the premise that many countries are confronted with similar challenges and issues around how 21CS are taught and learned in classroom settings and how education systems can support this process. OAA has taken a ground-up, collaborative learning approach where countries worked together to find solutions for developing and using assessment approaches that target 21CS and build their own capacity, rather than relying on external experts.

Cambodian team members illustrate "OAA!"

The OAA project has emphasized developing existing capacity and resources and changing mindsets to cultivate and support a new generation of assessment specialists within the participating countries and regions. OAA has worked in two regions—Asia and sub-Saharan Africa—and three focus countries within each region have participated in a capacity-building approach for designing, developing, and piloting classroom-based assessments of 21CS.

"This project is a combination of teaching and assessment… the core team, the national teams, and the teachers collaborate and participate. This is a very difficult thing—three different countries, very great distance between them, different languages—yet we see how these stakeholders' participation and collaboration are enhanced."

Dr. Munkhjargal Davaasuren, Former President of Mongolian National University of Education, Mongolia

Specifically, OAA partnered with Cambodia, Mongolia, and Nepal in Asia and with the Democratic Republic of Congo, The Gambia, and Zambia in Africa, with the support of the Network on Education Quality Monitoring in Asia (NEQMAP) and the Teaching and Learning: Educators' Network for Transformation (TALENT) in Africa.

School's vision and mission statements made explicit, St. Peter's Lower Basic School, The Gambia

CONTEXT AND BACKGROUND

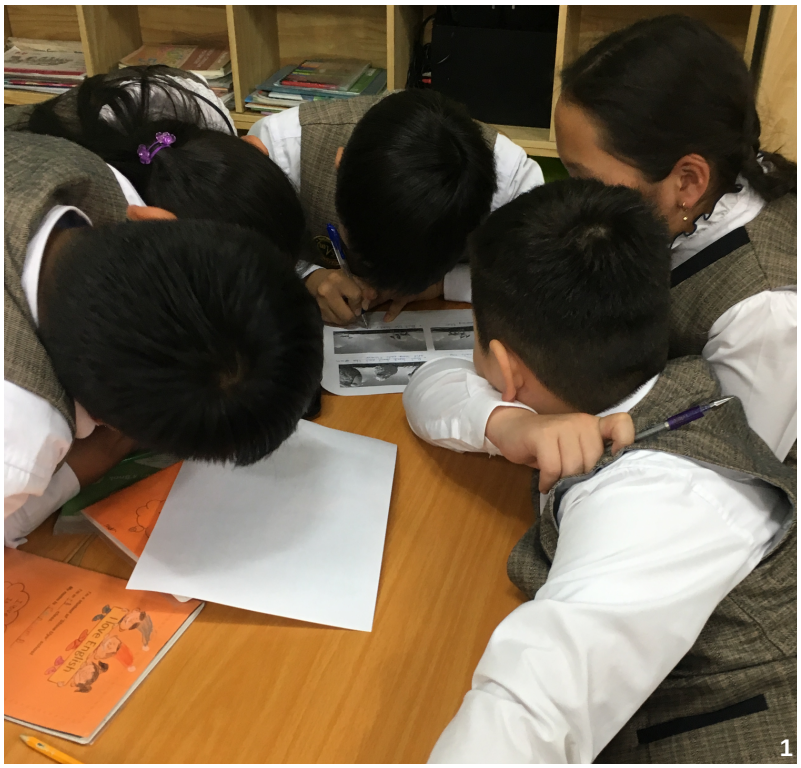
SDG 4.7 has supported and stimulated increased interest in education for sustainability and global citizenship. Underlying these notions is the need for individuals to build their expertise in contributing competencies such as critical thinking and collaboration, problem solving, and communication. Many countries have demonstrated their interest by identifying 21CS goals for student learning; reforming their curricula to include 21CS; and explore assessment options to support the new learning goals.

In fact, an examination of 161 countries' education policy documents indicates that most of the countries (88%) have included 21CS somewhere in their publicly available education policy documents, such as mission or vision statements, national education plans, or curricula (Care & Kim, 2018). However, very few countries (only 4%) showed evidence that 21CS are consistently identified across multiple policy documents, especially in curriculum and pedagogy policies, which may mean the teaching and learning of these skills are less evident in classrooms.

Educational assessment data are frequently used to select or rank students, rather than improve learning. Although assessment data may serve a system-level function, their use to support teaching and learning requires a mindset shift in countries that may have used assessment in the past primarily as a selection or ranking device.

Many assessment practices are based on a normative paradigm where there is an expectation that a small number of students will achieve at the highest level, a large group of students will be average, and a pre-determined number of students will fail. This model is not aligned with the expectations of the SDGs, which call for all children to have access to high-quality learning opportunities (access plus learning). In some contexts, and on some occasions, a pass/fail approach to assessment might be a reasonable strategy. However, where the purpose of assessment is to inform and improve learning outcomes, the pass/fail approach can lead to further marginalization of at-risk children and youth.

In addition, assessments are often misaligned—with each other and with other components of the education system. There is often little alignment between classroom-based assessments, national examinations, and regional or international assessments in which a country participates.The tools and methods are often chosen out of convenience, political motives, or simply because they have been previously used. Many countries have a national assessment framework that articulates the various assessments implemented and how the results are used.



1- Students collaborating on school-based tasks at Shine Uye School, Ulaanbaatar, Mongolia
2- Ministry officials engaging in collaborative problem solving, modelling the skills in Kathmandu, Nepal at a National Workshop
3- The Cambodian National Technical Team discussing how tasks target skills in Asia Workshop 3, Phnomh Penh, Cambodia
4- National Technical Team leaders from Zambia and The Gambia re-visioning existing assessment items in Dakar, Senegal

The purposes and uses of these assessments can vary widely. For example, classroom-based assessment may be gathered, reported, and used to better understand the actual subjects, topics, or skills that students are studying, as well as to understand how individual students are progressing. At state, regional, and national levels, although assessment tools may directly target the curriculum, the scoring, reporting, and use of the data tend to be in quantitative form and do not lend themselves to interpretation at the individual student and classroom levels. At the international level, the assessment tools may be only tenuously aligned with national curriculum and learning goals and provide information only at an aggregate level. Without a coordinated strategy, these various levels of measurement can undermine a system's ability to improve learning outcomes rather than support them.

> ***"The lack of alignment between the taught curriculum, the intended curriculum and assessment practices is evident; the skills are not well featured in any of the assessments and examinations conducted in The Gambia. This was confirmed through the collection of tools at the national and school levels."***
>
> Ousmane Senghor, Head of Assessment Unit, The Gambia

Misalignment can also occur between education system components, including assessment, curriculum, and pedagogy. While assessment is central to a system's delivery of its education goals, the curriculum and pedagogical skills of its teachers are equally essential. The three components are interdependent, and when one element of the system is changed, it has repercussions for the others. Therefore, a strategic focus on assessment must also take into account both curriculum and pedagogy (Care, Kim, Vista, & Anderson, 2018). How information is gathered through an assessment needs to be aligned with curricular and pedagogical approaches; otherwise, an assessment might measure something other than what is intended.

OAA drew together these two themes—the move toward 21CS, and the constructive use of assessment for the education of all. Since 21CS have not been previously widely measured, the lack of precedent provides an opportunity to introduce new ways of thinking about use of assessment in the classroom.

PROJECT GOALS AND OBJECTIVES

OAA was a three-year project designed to improve and sustain approaches for the integration of 21CS, with a focus on assessment as a lever. The project was designed to contribute to a mindset shift at the global level through targeted work at the regional and national level, so that assessment is viewed as a tool to improve teaching and learning across important skill domains necessary for success in life. The project adopted the perspective that assessment processes and tools must be designed for every child. Further, assessment should provide tools that can differentiate among children's learning needs or "readiness to learn," and that demonstrate each child's learning trajectory. Information generated from such assessment can then be used by teachers to inform instruction as well as to provide summary information usable at the system level.

Facilitated by NEQMAP at UNESCO Bangkok and the TALENT at UNESCO Dakar, OAA completed two foundation studies and then worked intensively with a group of three countries in each region to design, administer, and use the results of classroom-based assessments of 21CS.

National Technical Team members of the Democratic Republic of Congo, Kasang Nduku, Jovin Mukadi Tsangala, and Jerry Kindomba, as well as National Technical Team leader of The Gambia, Ousmane Senghor, at Workshop 4, Lusaka, Zambia

"Often we focus on and evaluate only the academic competencies. Of course, the child may be good at mathematics or good at science, but these competencies are not sufficient. It is necessary for the child to understand how to, for example, think critically, analyse, communicate, and collaborate—these are the skills that will serve the child in life. Of course, we try to assess within the disciplinary competencies."

Mr. Kasang Nduku, Expert chargé de la formation, Secrétariat Permanent d'Appui et de Coordination du Secteur de l'éducation (SPACE), Democratic Republic of Congo

Specifically, OAA was designed to:

- Support regional and national stakeholders in measuring learning across 21CS, with consequent capacity for teaching these skills;
- Demonstrate how to align assessment of skills with how they are written into curriculum and how they are taught; and
- Strengthen education systems' capacity to integrate 21CS into their teaching and learning to better promote the goals of the education systems in developing their students' readiness for work and lifelong learning.

In order to meet these goals, activities were designed to build assessment literacy, develop assessment approaches, and disseminate learnings.

Building assessment literacy

The goal of the first set of activities was to improve assessment literacy among global, regional, and national education stakeholders to set the foundation for mindset change and increase awareness of 21st century skills assessments among policymaker and other education stakeholders. Specifically, foundational research was conducted on 21CS and the implications of their nature for assessment approaches. This resulted in two reports that described how data from 21CS assessment can be used and interpreted in terms of learning outcomes to inform teaching and learning (Kim & Care, 2020; Vista et al., 2018) and identified global, regional, and national examples of the shift in educational learning goals toward equipping learners with a broad range of competencies, as well as the challenges around implementing these goals (Care, Vista, & Kim, 2019).

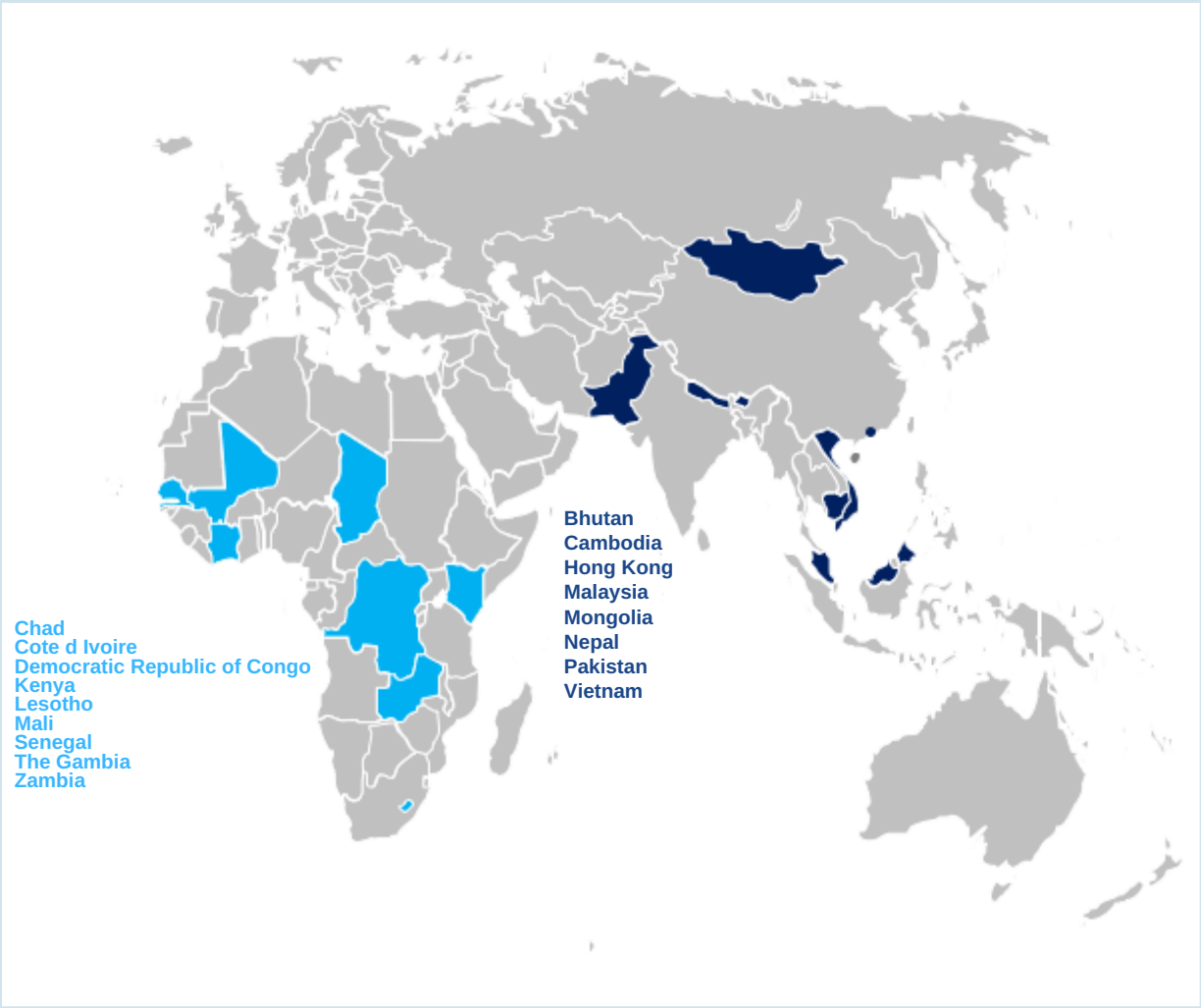
These reports were designed to serve as reference points for the practical work and summarize current research, assessment, terminology, debates, and case studies of assessment practices. In order to increase awareness of how assessment works and the significant role it plays in teaching and learning, as well as in education system evaluation and review, the research was and continues to be widely disseminated to education stakeholders, including teachers, policymakers, multilateral agencies, and civil society, at international, regional, and national convenings and conferences.

"A sample of school-based and national assessments analyzed during the OAA ministudy revealed that most of the assessment items tested primarily content knowledge and not [21CS] competences."

Victor Mkumba, Principal Curriculum Specialist, and Lazarous Kalirani, Principal Education Standards Officer, Zambia

In order to establish a baseline profile of how assessment of TVC, or 21CS, was perceived in the two regions, OAA undertook two ministudies. The first of these studies was undertaken in Asia (Care et al., 2019), and the second in Africa (Kim & Care, 2020). The studies played a seminal role in OAA, both due to their engagement of nearly 20 countries across the two regions (see Figure 1; dark blue denotes participating countries in Asia and light blue denotes participating countries in Africa), as well as in the identification of the state of play of assessment of 21CS. In short, very little evidence of assessment of 21CS was found either in classroom assessment or national assessments in participating countries. However, the studies indicated how traditional assessments can be revised to provide opportunities to capture and measure these skills.

Figure 1. Participating countries in OAA ministudy



Developing assessments

The second set of activities involved six countries across Asia and Africa in building capacity to design, develop, and use assessments of 21CS. Three elements characterized the work. Within each region, the three countries collaborated and developed common assessment tools. Second, the focus was on alignment of assessment with curriculum and pedagogy, requiring different stakeholders across the participating countries' education systems to come together. And third, state of the art assessment methods for well understood learning domains, such as literacy and numeracy, were applied to development of the 21CS tools. The larger goal of this set of activities was to inform new thinking around assessment; build capacity for designing and implementing assessment; and use assessment data to improve teaching and learning.

Members of the Mongolian, Nepali, and Cambodian National Technical Teams working on task templates at Workshop 2, Ulaanbaatar, Mongolia

In the Asia region, Cambodia, Mongolia, and Nepal worked to develop assessment tools for collaboration, problem solving, and critical thinking in mathematics, social sciences, and science for Grades 5 and 6. In Africa, The Gambia, Democratic Republic of Congo, and Zambia worked together to develop assessments for collaboration and problem solving in mathematics, health, environment, English, social studies, and science for Grades 6 and 8. Each country established a National Technical Team (NTT) to support the implementation of the OAA project and its activities. NTT member lists, and the schools that participated in the project, are located in Appendix B.

An important feature of the NTTs was their composition, which brought together leaders in assessment and curriculum and teachers in each country to harmonize the needs of each aspect of education. This composition was designed to ensure a grounded approach to the work, with the assessments co designed by professionals across the aspects.

Disseminating learnings

Throughout the project period, evidence has been gathered through key activities in the two regions. The focus countries have disseminated their learnings and progress at in-country, regional, and international workshops and convenings. The focus of these events has been two-fold: 1) on the assessment component of the work, and 2) on the identification of strategic pathways to better integrate 21CS into systems.

Beatrice Mbewe, of the Zambian National Technical Team and teacher from Vera Chiluba School, addresses stakeholders at the Ministry's Orientation Workshop on 21st Century Skills, National Science Centre, Lusaka, Zambia

In the short-term, the dissemination of the work was aimed at supporting the development of shared assessment resources. For example, the capacity of the focus countries to provide strong, evidence-based examples of positive use of assessment for instruction may encourage the regional networks to hold dissemination events for wider implementation. The longer-term goal was to inform the broader global education community on the approach to measuring 21CS and consider its sustainability and scalability, such as extending technical capacity to different learning domains, schools or districts, or increasing teacher training in assessment development and use.

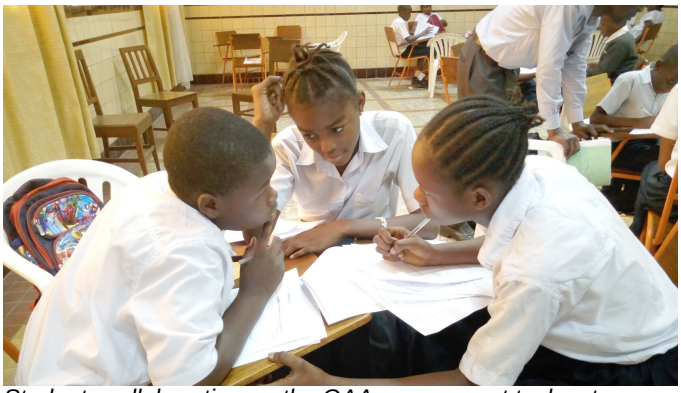
"It begins with you and me to provide an education that equips Zambians to collaborate, solve problems, and think critically."

Dr. Jobbicks Kalumba, Ministry of General Education Permanent Secretary, Zambia

THE OAA APPROACH

The OAA project was designed to provide a prototype approach for countries to deepen integration of 21CS into their teaching and learning via the development of classroom-based assessments of 21CS. By the conclusion of the project in the spring of 2020, the aim was for all participating countries to mobilize a critical mass of experts and teachers familiar with the development of assessments of 21CS, with the long-term objective of changing assessment practices to represent stated learning goals.

> ***"The concept of collaboration is happening among us as together we try to think through the solutions and create the tasks and items. We will apply this kind of activity with our teachers and also with our students."***
>
> Mr. Chinna Ung, Director Education Quality Assurance Department, Ministry of Education, Youth and Sport, Cambodia



Students collaborating on the OAA assessment tasks at Collège Boboto, Kinshasa, Democratic Republic of Congo

The hallmark of the OAA approach is collaborative learning—building upon existing expertise and strengths by working alongside countries and regions rather than using a training or short-term consultancy approach. The NTTs from each focus country participated in a series of workshops hosted in each of the countries, with opportunities to apply learnings in their respective countries between each of the workshops. Through the workshops, the countries identified specific 21CS to target and ages/grade levels for assessment tool development, as well as embarked on assessment development via an apprenticeship model, where countries worked alongside technical experts in the field. Through this process, the intention was for NTTs to acquire stronger skills in understanding the philosophical issues in education that influence the ways assessment is constructed and used to enhance student learning outcomes, as well as understand the need for assessment to be aligned with curriculum and teaching. Reflecting the belief that all countries can benefit from each other's progress integrating 21CS, NTT collaboration provided a major mutual contribution and efficiency mechanism in the development of tools and in building regional capacity.

The main steps in the OAA approach are summarized in Figure 2.

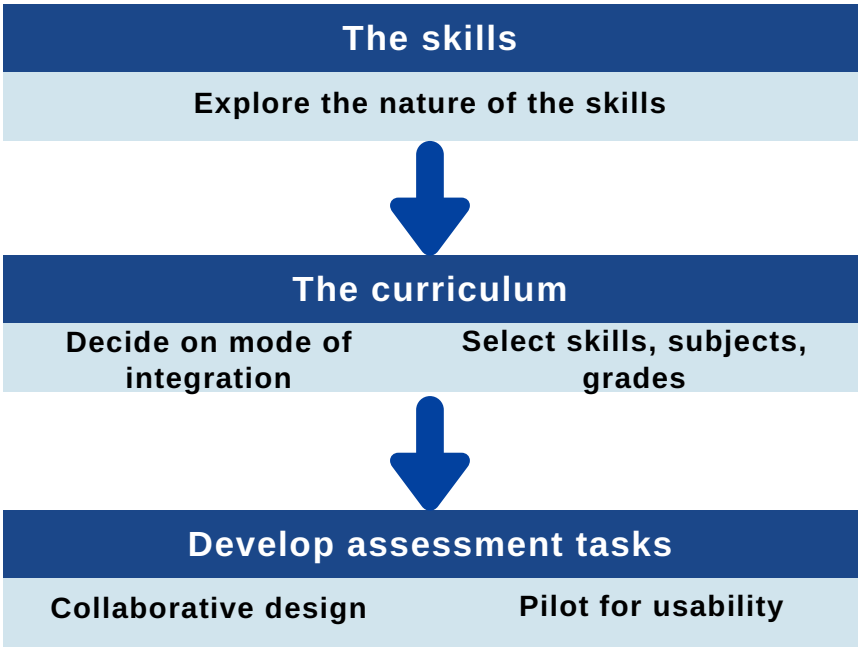
Exploring the nature of skills: What does a 21CS look like? Once we move beyond the label for a skill such as problem solving or communication, how can we describe what the skill looks like when an individual uses it? Once we have identified the subskills that contribute to the broader skills, how can we describe them in ways that will help teachers and students develop them?

Identifying mode of integration of 21CS in the curriculum and determining the skills, subjects, and grades to work with: Will these new learning goals be taught explicitly in their own right? Once we have identified the mode, what does it mean to integrate critical thinking, for example, into the study of a social science topic for Grade 6, 8, or 10 students?

Asia National Technical Team members sharing expertise at NEQMAP's Capacity Building Workshop on Transversal Competencies, in Manila, The Philippines

Developing the assessment tasks including piloting: How do we ensure that 21CS are reflected in assessment tasks that have historically prioritized acquisition of knowledge, but without losing what we value in traditional learning? Working from what we already know in how to assess, how can we revise assessment tasks to reflect new learning goals? Can tasks be implemented successfully in classrooms?

Figure 2. The OAA activity sequence



CONCLUSION

These three steps constitute just one part of whole system integration of 21CS. The steps act as an entry point to triggering required changes so a country can plan a strategic roadmap on sequencing its scaling processes in teaching and learning practices. The immediate outputs are sets of assessment tasks co-developed by each group of three countries and guidelines for future assessment development, both by central Ministry of Education departments and teachers and schools. At its core, the OAA process should have instilled in countries an appreciation for the necessity of this whole system perspective.

The reports

Following publication of this initial framework, four additional reports will publish throughout the winter and spring of 2020 expanding upon the topline information outlined here. These publications will include: a focus on Asia and Africa describing the OAA activities in each region, and the slightly different approaches taken between the two; examples of 21CS assessment tasks with explanations on how teachers can use them and develop their own tools; and a system-level guide on policy pathways for countries integrating 21CS.

"The Ministry plans for integration of transversal competencies in school curricula re-design drawing on the Ministry's learnings and experience from Brookings's OAA work, the Finnish Technical Assistance for Soft Skills project, and the British Council's Connecting Classrooms Project."

Dr. Lekha Poudel, Director General Curriculum Development Centre, Ministry of Education, Science and Technology, Nepal

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APPENDIX A: WHAT ARE 21ST CENTURY SKILLS?

Young children and students need a range of skills and competencies, beyond literacy and numeracy, to succeed in the 21st century (Care & Anderson, 2016). Education systems globally acknowledge the importance of breath of skills, such as communication, critical thinking, and problem solving (Care, Anderson, & Kim, 2016). Yet, what are considered skills vary widely, not only from country to country (Care et al., 2016), but also across the range of education stakeholders within countries (Care, Kim, Anderson, & Gustafsson-Wright, 2017). What are considered skills range from what is typically considered '21st century skills', such as collaboration, critical thinking, and social and interpersonal skills; to character traits, such as confidence and self-discipline; to workforce and society characteristics, such as being a productive member of society and being "moral" (Care et al., 2017). Many of these skills have been highly valued in previous centuries, but this century values them more explicitly. A clear understanding of these skills is a critical starting point for identifying which skills to teach and learn.

What do we mean when we say “skills?”

Skills are enablers. They are a set of competencies that enable one to respond adaptively to situations that are new and different (Care & Anderson, 2016). Skills are not the same as knowledge. Knowledge can be acquired but knowing does not mean you are able to apply that knowledge to specific situations. With skills, one can put knowledge into practice by applying what has been learned in one context and transferring that learning to an entirely new one. A critical aspect of the transfer is not only understanding and effectively using the particular skill but also recognizing or noticing where, when, and how that particular skill is needed in novel situations (Halpern, 1998).

Skills progress from simple to more complex. Skills consist of a sequenced set of building blocks that progress from simple to successively more sophisticated forms. Key markers along the developmental pathway, or learning progression, make visible the underlying processes. The increasing skill levels that are described by a learning progression are qualitatively different from each other. This means that the very nature of the skill changes as it becomes more sophisticated—as opposed to it being associated with quantity (Kuhn, 1999). For example, when a young child is learning to walk, she progresses from sitting, to standing, to walking—which all involve different processes from one level to the next. This is in contrast to being able to walk three steps and then 20 steps.

Skills are teachable. Learning progressions provide a pathway for teaching and learning the skills. Identifying the various markers and expected behavioral outputs as skills develop can act as a guide for teachers. Teachers can identify where each student is in his learning progression, and what the next step is in the sequence, so that they can support student learning. In addition to teaching a particular skill, an important component is recognizing that a particular skill may be needed in a new or different situation and facilitating the application of skills. This means supporting children to focus on the structure of the situation, so that the underlying characteristics of when to use what skill in what way becomes salient, as opposed to the domain-specific, or content-based, surface characteristics (Halpern, 1998). It also means providing authentic learning tasks—akin to real-world tasks—that focus on applying the skills in many different ways to show when they are effective.

APPENDIX B: OAA KEY PARTNERS

The emphasis of OAA was on developing existing assessment capacity and resources and changing mindsets to cultivate and support the development of a new generation of assessment specialists around the world. As such, OAA partnered with six countries in Asia and Africa where the project was implemented, with the support of two regional networks—Network on Education Quality Monitoring in the Asia-Pacific (NEQMAP) at UNESCO Bangkok and Teaching and Learning: Educators' Network for Transformation (TALENT) at UNESCO Dakar.

Country Partners

In the Asia-Pacific region, three countries, Cambodia, Mongolia, and Nepal, participated in the OAA project. These countries worked collaboratively to develop and implement assessment tools for collaboration, problem solving, and critical thinking in mathematics, social sciences, and science for Grades 5 and 6. In sub-Saharan Africa, the participating countries, The Gambia, Democratic Republic of Congo, and Zambia, worked together to develop and implement assessments for collaboration and problem solving in mathematics, health, environment, English, social studies, and science for Grades 5-8. Each country has established a National Technical Team (NTT) to support the implementation of the OAA project and its activities. Table B1 lists each country's NTT members and their participating schools. Additional details concerning schools' personnel and roles and responsibilities are found in the forthcoming regional reports (i.e., Parts 2 and 3 in the series—"Focus on Asia" and "Focus on Africa", respectively).

The selection of these countries to work intensively on assessing 21CS were based on stated country commitment to integrating 21CS into their education systems. Countries that were interested in participating in the OAA project provided information relevant to the endeavor, current initiatives associated with 21CS, and reform processes. Individuals within ministries of education completed a questionnaire to identify their respective country's major assessment needs, with a focus on imperatives associated with developing expertise in assessment of 21CS aligned with their national education goals. The results were used to inform the selection of countries, as well as define the common needs upon which to focus in the project.

The questionnaire results were analyzed according to the following criteria:

- **Government approval and support–**To ensure that the implementation of the project and its activities within the country would be supported by the respective ministries or departments of education. Each participating country needed official government approval to participate in the project.

- **Existing infrastructure and capacity–**Some technical capacity for general educational assessment (including test development, field operations, and data analysis) within the official administrative structure was required. Ideally, there would be teams or organizations with experience in implementation of a national or an international assessment program available. Although the project itself was not intended to implement a large-scale assessment, the involvement of teams with that experience helped provide a pathway to sustainability.

- **Level of interest in 21st century skills–**Interest in 21CS at the national education system level was required. The ideal scenario was when a country had already made explicit some of these skills in the curriculum.

- **Alignment of priorities with other selected countries–**The interests of all countries were taken into account, especially in analyzing the probability of them working together to reach common goals. In particular, there was a need for consensus on selection of specific 21CS upon which to focus.

Differences in existing assessment infrastructure across interested countries were significant, and relatively more so for the African region than for Asia. Regardless, existing resources did not seem to influence countries' level of interest or their educational priorities. That is, even countries with few resources to implement conventional assessments still indicated strong interest in assessing 21CS and exploring the implications of 21CS for curricular and pedagogical realities.

Country	Teams	Schools
Asia-Pacific Region		
Nepal	Dr. Lekha Poudel, Director General (Former) Mr. Keshab Prasad Dahal, Director General Mr. Devi Ram Acharya, Section Officer Education Review Office Mr. Shyam Prasad Acharya, Section Officer Education Review Office	• Shree Changunarayan Secondary School, Bhaktapur • Shree Sisneri Secondary School, Lalitpur • Shree Mahendragram Secondary School, Lalitpur • Shree Manohar Secondary School, Kathmandu • Shree Sarswoti Niketan Secondary School, Kathmandu • Shree MahendraBouddha Secondary School, Kathmandu • Shree Gram Sewa Secondary School, Kathmandu • Shree Namuna Machindra Secondary School, Lalitpur
Cambodia	Mr. Chinna Ung, Director Education Quality Assurance Department Mr. Sarin Sar, Chief of Office Education Quality Assurance Department Mr. Hav Khou, Vice-Chief of Office Education Quality Assurance Department Mr. Tararaksmey San, Officer Education Quality Assurance Department	• Preah Norodom Primary School, Phnom Penh Municipal Office of Education, Youth and Sport • Chao Ponhea Hok Primary School, Phnom Penh Municipal Office of Education, Youth and Sport • Anukwat Bun Rany Hun Sen Primary School, Kandal Provincial Office of Education, Youth and Sport • Prek Samrong Bun Rany Hun Sen Primary School, Kandal Provincial Office of Education, Youth and Sport
Mongolia	Mr. Ganbat Lkhagvasuren, Head of Examinations and Research Department Education Evaluation Center Dr. Munkhjargal Davaasuren, Independent Expert in Curriculum and Instruction and Former President of Mongolian National University of Education Mrs. Tungalagtuul Khaltar, Officer of Project Implementation Ms. Amarjargal Adiyasuren, Lecturer in Department of Education Administration, Mongolian National University of Education	• School No. 5, Ulaanbaatar • Shine Uye School, Ulaanbaatar • Erdmiin Dalai Complex School, Dundgovi • Erdenedalai Soum School, Dundgovi

Country	Teams	Schools
Sub-Saharan Africa Region		
Democratic Republic of Congo	Mr. Jovin Mukadi Tsangala, Conseiller au cabinet du Ministre de 'Enseignement Primaire, Secondaire et Professionnelle, Cabinet du Ministre Mr. Kasang Nduku, Expert chargé de la formation, Secrétariat Permanent d'Appui et de Coordination du Secteur de l'éducation (SPACE) Mr. Smith Mpaka, Coordonnateur de la Cellule Indépendante d'Évaluation des Acquis Scolaires Mr. Mapasi Mbela Chançard, enseignant au Collège des Savoirs Dr. Jerry Kindomba, Country Director Giving Back to Africa	**Zone urbaine** • Ecole primaire EP1 BOBOTO • Ecole primaire CS MANYANGA • Ecole primaire EPA 2 GOMBE • Ecole primaire EP1 BINZA • Ecole primaire COLLEGE DES SAVOIRS (péri-urbain) **Zone rurale** • Ecole primaire EP1 BOKO • Ecole primaire EP1 KOLA • Ecole primaire EP MBAMBA
The Gambia	Mr. Momodou Jeng, Director, Science and Technology Education and In- service Training Unit Mr. Ousmane Senghor, Head of Assessment Unit Mr. Omar Ceesay, Education Officer Mrs. Isatou Ndow, Vice Principal, Gambia College Mrs. Saffie Nyass, Deputy Head Teacher	• St. Peter's Lower Basic School • Mansa Kolley Bojang Lower Basic School • Abuko Lower Basic School • St. Mary's Lower Basic School
Zambia	Mr. Victor S. Mkumba Principal Curriculum Specialist Social Sciences; Directorate of Standards and Curriculum Mr. Lazarous B. Y. Kalirani, Principal Education Standards Officer Tertiary Education; Directorate of Standards and Curriculum Mr. Shadreck Nkoya, Assistant Director Research and Test Development; Examinations Council of Zambia Ms. Beatrice B. Mbewe, Teacher Vera Chiluba Primary School; Ministry of General Education	• Kabulonga Girls Secondary School • Mount Makulu Secondary School • Parklands Secondary School • Vera Chiluba Primary School • Matipula Primary School • Chibolya Primary School

Regional Networks

The **Network on Education Quality Monitoring in the Asia-Pacific** (NEQMAP) is a platform for exchanging knowledge, experience, and expertise on the monitoring of educational quality in Asian-Pacific countries and jurisdictions. NEQMAP focuses on student learning assessment as a key tool for monitoring education quality and provides opportunities for capacity development, research, and knowledge sharing among network members and other relevant stakeholders.

Teaching and Learning: Educators' Network for Transformation (TALENT) serves as a platform for supporting the implementation of the Framework for Action of the Sustainable Development Goal 4. TALENT serves as a forum for exchanging experience, expertise, and knowledge on interventions in the areas of improving teaching and learning in sub-Saharan African countries, as well as capacity building of its members and other relevant stakeholders.

For the OAA project, NEQMAP and TALENT provided a forum for sharing research on issues around 21st century skills assessment, thereby helping build assessment literacy of regional and national education stakeholders in Asia-Pacific and African regions. In addition, these two regional networks provided opportunities for participating countries to share their project learnings and demonstrate a collaborative, cross-country approach to developing 21st century skills assessment tools, which can contribute to increasing capacity and shifting mindsets at the regional level around the development and use of assessment tools.