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REPORT ON GOVERNMENT ONLINE VIDEO MEETING – 12th August 2020
FROM LEARNING LOSS TO LONG-TERM RESILIENCE:
IMPLEMENTING CURRICULUM & ASSESSMENT REFORM



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FORMAT & PARTICIPANTS

SECTION 1.

Format & Participants

1.1 Introduction

The purpose of this private video meeting for government and civil society officials in Africa, Middle East and Indian Ocean, organised in partnership with Cambridge, was to discuss curriculum and assessment reform, especially in response to the disruption caused to education by the COVID-19 pandemic. Generally, all participants were encouraged to discuss the actions of their governments and institutions, and to make policy recommendations where appropriate.

Many countries have already implemented competency-based curricula to better prepare their young people to have the right real-world skills for the 21st century. Student agency has really come to the forefront at the heart of modern education with outcomes such as growth mindset becoming crucial drivers for success in education. Stronger growth mindset means students are more likely to be motivated to master difficult tasks and set ambitious learning goals. The world increasingly rewards people for what they can do with what they know and as well as cognitive skills like creativity and critical thinking we also need to consider social and emotional skills, resilience, empathy, and curiosity.

Especially during the prolonged period of school closures, assessment has come to the fore of being of critical concern to policy makers. Summative assessment has long had the advantage of providing a numerical measure for student grading and further progression. Yet, it is a snapshot in time that is effectively testing the ability of the student to recall information. Research has long shown the advantages of formative and continuous forms of assessment, yet national investment in evaluation methodologies has often ignored this research. COVID-19, as a single event, has been a huge catalyst in changing the mindset of education authorities.

During the private break sessions of the meeting, officials were encouraged to address the following questions:

Is the shift to more competency-based curricula necessary to better prepare students for the real-world challenges of the 21st century?



To implement competency-based learning what new training of teachers needs to be done to ensure they have the skills to identify specific learning outcomes of their students?

Given the impact of COVID-19, many countries are talking about reducing the number of subjects or even the amount of content per subject, what are you doing or recommending regarding changing the existing curriculum?

Assessment is critical to competency-based learning and so what reforms are needed in ensuring best practices, benchmarking, and that any evaluation is authentic to the needs of the future workplace for young people?

Much research in recent years has identified advantages of formative assessment over summative, but there has not been a noticeable global trend until recently with the impact of prolonged school closures. Is now the time to accelerate assessment reforms with a greater emphasis on continuous project-based evaluation? With the call for reform of curricula and assessment to build greater resilience into the system, what needs to be done to ensure the teaching profession can implement the decisions made at policy level?

1.2 Executive Summary & Key Findings of the Meeting

Curriculum reform has been ongoing in several countries and certainly many participants in this meeting spoke of the implementation of competency-based curricula as we heard in the opening statement from John Kimotho of Kenya. Equally Ahmed El-Ashmawi of Egypt spoke of their assessment reforms as part of Education 2.0, but although reforming the curricula naturally implies needing to change assessment methodologies, the conundrum of how to tackle assessment is far more challenging. It does seem that many feel COVID-19 will be a catalyst for change, though uncertainty

remains in how to best implement assessment reforms. The following are not exhaustive, but 11 important issues drawn from this meeting are:

Build teacher capacity if you truly want to deliver reforms

Observations of implementing a competency-based curriculum indicate the need to have more formative assessment and less summative examinations

The future jobs landscape is changing faster than ever and for educators this means better readying students with real-world and life skills

COVID-19 has brought about a sense that blended learning is an inevitability

Curriculum reform needs to be included within the continuous professional development of teachers and such changes require a constant nurturing of the profession to deliver reforms that look good on paper but are far tougher to realise in practice

Transforming curriculum and assessment is a recognition of the need to better reflect the world we live in and to incorporate a range of social, emotional and communication skills into learning

Overcoming teacher reluctance to change can be achieved through incentivising the learning of new competencies through career progression

Evidence-based research to better understand the link between learning and curricula is necessary to ensure the teaching training institutions and universities have real data to apply to teacher qualification and training programs

Can formative assessment be as objective as summative assessment? The debate between these two methodologies continues, though it does seem that policy makers would prefer to see more continuous project-based evaluation in their schools

Any reforms must be accompanied by benchmarking and quality assurance

The role of parents brings its own pedagogical challenges, but parental and community engagement is more important than ever if blended learning becomes the norm and the methods of grading their children change

1.3 Format of Video Conference & this Report

In section 1.4 we list the ninety-four participants of this video conference on curriculum and assessment

reform. The most immediate lesson of online video conferencing is to ensure that every participant has a voice. Small groups are essential. So, after opening statements the event was broken into small groups each with a moderator to take notes and provide a summary.

Prior to the break-out rooms there were opening statements from: John Kimotho, Director of Educational Media at the Kenya Institute of Curriculum Development who talked about the implementation of competency-based curriculum in Kenya; and Egyptian Government official Ahmed El-Ashmawi, Member of the Advisory Committee for the Reform of Technical Education, who gave a briefing on the reform of assessment in Egypt. Although all discussions were recorded and transcribed for the purpose of this report, none of the quotes or what was said during the private break-out rooms is made attributable to any one person.

The following was the video conference format

Part A: Opening statements from John Kimotho, Director of Educational Media at the Kenya Institute of Curriculum Development, and official Ahmed El-Ashmawi, Member of the Advisory Committee for the Reform of Technical Education, Egypt.

Part B: Ten break-out groups were formed, each with a moderator to record discussions and take note of the key points raised.

Part C: All participants returned from their break-out groups. Summary and synthesis of key issues was given by Jane Mann, Managing Director of Cambridge. The final closing policy comments were given by Prof Rose Luckin who is Professor of Learner Centred Design at UCL Knowledge Lab.

The total time of the video conference was 110 minutes

After introducing the participants in 1.4, the format of this report is structured around the policy issues and non-attributable quotations. The participants hold senior positions in education from multiple countries and expressed what they are experiencing as well as their own policy recommendations.

When it comes to curriculum and assessment reform along with the social context and the desire for governments to ensure young people are equipped with measurable real-world skills, the issues overlap and blend into one as should be expected when taking a holistic approach to education. In this report we have done our best to identify the main subjects taken from what participants said to provide a

disseminated report that flows as follows:

Overview

Assessment reform

Curriculum reform

Skills and the social context

1.4 Participants

We would like to thank all those for participating and providing such outstanding contributions. The opportunity for them to openly converse in small break-out groups provides us with a discerning judgement on the key issues, immediate policy recommendations and their own insights into future sustainability. It is an honour for the organisers to host such a distinguished gathering. Everyone committing their time during COVID-19 is a true testament to their desire to ensure strong decision making and reform of educational practices where appropriate. Participants are listed by country, alphabetically:

ANGOLA: Prof Pedro Teta, Executive Director, Angolan Sovereign Wealth Fund

BAHRAIN: Ahlam Alamer, Assistant Undersecretary for Curricula and Educational Supervision, Ministry of Education

BAHRAIN: Lateefa Albnoodha, Assistant Undersecretary for General and Technical Education, Ministry of Education

BAHRAIN: Ebrahim Ali Burshaid, Director of Secondary Education, Ministry of Education

BAHRAIN: Dr Mohamed Alseddiqi, Director of Technical and Vocational Education, Ministry of Education

BAHRAIN: Dr Gurmullah Alghamdi, Rector, Arab Open University

BOTSWANA: Dorcas Phirie, Deputy Director for Teacher Training and Technical Education, Ministry of Tertiary Education, Research, Science and Technology

BOTSWANA: Lechani Rammoni, Manager, Product Development and Standards, Product Development and Standards Directorate, Botswana Examinations Council

BOTSWANA: Onalenna Keatimilwe, Manager, Product Development and Standards, Product Development and Standards Directorate, Botswana Examinations Council

BOTSWANA: Letso Dibeela, Manager, Product Development and Standards, Product Development and Standards Directorate, Botswana Examinations Council

BOTSWANA: Ravi Srinivasan, Pro Vice Chancellor (Internationalisation), Botho University

BOTSWANA: Lucky Moahi, Deputy Pro Vice Chancellor (Internationalisation), Botho University

CAMEROON: Comfort Ngu, Director of Studies and Planning, Ministry of Basic Education

CAMEROON: Lawrence Kambiwoa, Chief of Computer Studies, Ministry of Basic Education

CAMEROON: Dr Lucas Agwe, Regional Coordinating Inspector, Southwest, Ministry of Secondary Education

CAMEROON: Dr William Shu, Public & Alumni Relations Officer, Buea University

CAMEROON: Prof Elizabeth Vukeh Tamajong, Deputy Vice Chancellor, ICT University

CAMEROON: Dr Alain Vilard Ndi Isoh, Dean of the Faculty of Business Management Studies, ICT University

CANADA: Giancarlo Brotto, Cofounder & Executive Director, Catalyst & GOLA Founding Partner.
Moderator

COTE D'IVOIRE: Sylvie Tanflotien, Consultant at the Ministry Integrating Technology in Education, Ministry of National Education, Technical Education and Vocational Training

COTE D'IVOIRE: Aboubacar Coulibaly, Director of Information Technologies and Systems (DTSI), Ministry of National Education, Technical Education and Vocational Training

EGYPT: Ahmed El-Ashmawi, Member of the Advisory Committee for the Reform of Technical Education, Ministry of Education & Technical Education. *Opening Speaker*

EGYPT: Dr Mahmoud Diab, Advisor of Deputy Minister for Technical Education and Competence Based Curriculum, Ministry of Education & Technical Education

EGYPT: Dr Inas Sobhy, Director General eLearning, Ministry of Education & Technical Education

GHANA: Akwasi Addae-Boahene, Chief Technical Advisor, Ministry of Education

HUNGARY: Adam Collis, Cofounder & Director of Innovation, Catalyst & GOLA Founding Partner. *Moderator*

INDIA: Preeti Hingorani, Vice President, Cambridge. *Moderator*

JORDAN: Ibtisam Ayyoub, Secretary General - Jordan National Commission for Education, Culture and Science, Ministry of Education

JORDAN: Eng Ruba Ahmad Omari, Director of Queen Rania Centre, Ministry of Education

JORDAN: Malak Al-Massad, Head of the Department of English at the Directorate of Curriculum & Textbooks, Head of the Development Coordination Unit

JORDAN: Lama Al Natour, Head of the Development Coordination Unit, Head of the Development Coordination Unit

JORDAN: Reem Bsaiso, Founder & Managing Partner Global Outreach & Head of Middle East Government Relations, Brains Global

KENYA: John Kimotho, Director Educational Media, Kenya Institute of Curriculum Development. *Opening Speaker*

KENYA: John Tuwei, Deputy Director of Technical Education, Ministry of Education

KUWAIT: Dr Duna Almashaan Alkhudhair, KFSA Scholar - Education Leadership K12, Kuwait Foundation for the Advancement of Sciences

LIBYA: Prof Mokhtar Jwaili, Chief Advisor on TVET & Entrepreneurship, Ministry of Education

LIBYA: Dr Masauda Elsayed, Director General Centre for Training & Education Development, Ministry of Education

MALDIVES: Hon Abdulla Rasheed, Minister of State, Ministry of Education

MALDIVES: Hon Mohammed Ihsan, Deputy Minister, Ministry of Education

MALDIVES: Moosa Adam, Policy Executive, Ministry of Education

MALDIVES: Hussain Majid, Monitoring & Evaluation, National Institute of Education, Ministry of Education

MOROCCO: Elarbi Imad, President, Moroccan Centre for Civic Education

NAMIBIA: Nickey Eiman, Chief Education Officer, Ministry of Education, Arts & Culture

NAMIBIA: Patrick Simalumba, Director, Ministry of Education, Arts & Culture

NAMIBIA: Elizabeth Ndjendja, Deputy Director: Examinations, Certification, Correspondence and Enquiries. Directorate of National Examinations and Assessment, Ministry of Education, Arts & Culture

NAMIBIA: Rauna Ndinoshiho, Deputy Director National Examinations and Assessment, Ministry of Education, Arts & Culture

NAMIBIA: Dr Charmaine Villet, Dean of the Faculty of Education, University of Namibia

NAMIBIA: Maurice Nkusi, Acting Director Teaching and Learning Unit, Namibia University of Science & Technology

OMAN: Azza Alharthi, Assistant Director General Education Evaluation, Ministry of Education

OMAN: Fathiya Mohammed Al Maawali, Senior English Supervisor, Ministry of Education

PALESTINE: Dr Basri Salmoudi, Deputy Minister, Ministry of Education

PALESTINE: Dr Tharwat Ziad, Assistant Deputy Minister, Head of the Curriculum Centre, Ministry of Education

PALESTINE: Dr Mohammad Mattar, Head of Evaluation and Research, Ministry of Education

QATAR: Nouf Al-Kaabi, Director of Policies and Research, Ministry of Education and Higher Education

QATAR: Maryam Alboainain, Director of Directorate of Early Childhood Development, Ministry of Education and Higher Education

RWANDA: Emmanuel Mucangando, Advisor to the Minister of State in charge of Primary and Secondary Education, Ministry of Education

RWANDA: Dr Christine Niyizamwiyitira, Head of ICT in Education Department, Rwanda Education Board

SAUDI ARABIA: Dr Ali bin Mohammed Al-Rubaian, Consultant in the General Administration for Research & Innovation, Education & Training Evaluation Commission

SAUDI ARABIA: Dr Bandar Al-Rami, Dean of Computer Studies, Arab Open University

SENEGAL: Cheikh Bèye, Head of the Quality Division, Department of Elementary Education, Ministry of National Education

SENEGAL: Aminata Lo, Teacher Trainer - SIMEN, Ministry of National Education

SENEGAL: Maïmouna Soudé Souare, Elementary School Inspector, Education Planning and Reform Direction, Monitoring and Evaluation Division, Ministry of National Education

SOUTH AFRICA: Seliki Tlhabane, Chief Director for Curriculum & Quality Enhancements Programmes, Ministry of Basic Education

SOUTH AFRICA: Dr Mark Chetty, Director – National Assessment, Ministry of Basic Education

SOUTH AFRICA GAUTENG: Handson Mlotshwa, Director: Teacher Development & ICT Programmes, Department of Education

SOUTH AFRICA WESTERN CAPE: Anita Van Vuuren, Chief Education Specialist Capacity Building, Department of Education

SOUTH AFRICA WESTERN CAPE: Christelle Barkhuizen, Chief Education Specialist Capacity Building and Implementation, Department of Education

SOUTH AFRICA WESTERN CAPE: Elzette Brown, Deputy Chief Education Specialist: e-Content Manager, Department of Education

SOUTH AFRICA WESTERN CAPE: Gafieza Ismail, Deputy Chief Education Specialist Change Management Manager, Department of Education

SOUTH AFRICA WESTERN CAPE: Gail Ahrends, Senior Education Specialist, Assessment Management, Department of Education

UGANDA: Edward Ssebukyu, Commissioner for Private Schools and Institutions, Ministry of Education and Sports

UGANDA: Grace Baguma, Director, National Curriculum Development Centre

UGANDA: Bernadette Nambi, Deputy Director, National Curriculum Development Centre

UGANDA: Angela Kyagaba, Senior Curriculum Specialist, National Curriculum Development Centre

UK: Jane Mann, Managing Director, Cambridge. *Synthesiser & Moderator*

UK: Dr Hanan Khalifa, Director Education Alliances, Cambridge. *Moderator*

UK: Dominique Slade, Head of Technical and Vocational Pathways, Cambridge. *Moderator*

UK: Emma Buckby, Head of Marketing, Cambridge. *Moderator*

UK: Stephen King, Senior Education Advisor, Cambridge. *Moderator*

UK: Dr Chris Martin, Education Advisor for Education Reform, Cambridge. *Moderator*

UK: Kagendo Salisbury, Marketing Manager, Cambridge

UK: Tracey Peel-Ridealgh, Logistics Coordinator, Cambridge

UK: Dr Rose Luckin, Professor of Learner Centred Design, UCL Knowledge Lab. *Moderator*

UK: John Glassey, CEO, Brains Global. *Host*

UK: Claire Urie, Head of Government & International Relations, Brains Global

UK: Victoria Tate, Head of Education Partnerships, Brains Global

UZBEKISTAN: Dr Feruza M Rashidova, Director of Academic Lyceum, Uzbek State University of World Languages

YEMEN: Dr Ahmad Numan Abdul-Karim Al-Shami, Head of Assessment Department, Education Research and Development Centre, Ministry of Education

YEMEN: Mohammad Sharaf-Eddin, Director General - E-Learning, Ministry of Education

YEMEN: Shukrieh Ali Al-Ba'dani, Coordinator of the Teaching Group at the Ministry, Ministry of Education

ZAMBIA: Moses Phiri, Assistant Director - Policy, Ministry of General Education

ZAMBIA: Milner Makuni, Director - Policy and Planning, Smart Zambia, Office of the President

ZIMBABWE: Peter Muzawazi, Chief Director, Junior, Secondary & Non-Formal Education, Ministry of Primary & Secondary Education

ZIMBABWE: John Dewah, Chief Director, Curriculum Development and Technical Services Department, Ministry of Primary & Secondary Education



DISCUSSIONS

SECTION 2.

Discussion

2.1 Opening Statements

The opening statements were provided by John Kimotho, Director of Educational Media at the Kenya Institute of Curriculum Development, and official Ahmed El-Ashmawi, Member of the Advisory Committee for the Reform of Technical Education, Egypt.

The opening statement of John Kimotho is in conjunction with the presentation as per appendix A.

Kenya as a developing country has considered the need for 21st century skills and the misalignment between learning content and the world of work. Kenya started looking at what curriculum reforms to content and knowledge are needed for the competencies that are required in terms of the country's national needs, Vision 2030, vocational qualifications, and sustainable development goals. The country wishes to advance the progress of its students as globally competitive citizens with a good standard of living, as well as being creative and innovative. Skills are needed, teachers need to be re-tooled, learners must acquire new competencies and know how to apply them in the real world.

Equally this also means addressing the requirement to have competency-based assessment. This includes ensuring that the assessment is based on industry best practices such that learners are ready for what they will face in their future jobs. Over the last four years the Kenyan Ministry of Education has identified that the most important thing is to build the capacity of teachers such that they can implement and deliver competency-based assessment. The impact of COVID-19 has not so much been on the competency-based curriculum (CBC) but rather the forthcoming adjustments needed to fulfil social distancing and further develop blended learning, especially for periods of school closures.

Another important aspect of this is how such learning fits into the requirements of the local community and what activities will better enhance community service, as well as students understanding life skills and even how to manage through difficult times such as COVID-19. With the CBC in Kenya they have strongly observed the need to have more formative assessment and less summative examinations. It is critical to daily life that the testing of learners



gives an authentic assessment of their abilities, motivations, competencies, and proficiencies to perform future tasks. From a governance point of view this needs to be reflected in the leadership of institutions where responsibilities overlap, such as in Kenya which has the Institute for Curriculum Development for curricula, the National Examinations Council for assessment and the Teachers Service Commission for teacher management. Assessment rubrics need to be seen in the context of the CBC, and in turn teachers need to be upskilled. Various government departments and agencies are now coming together in a coordinated effort to build more resilience into the system.

In Kenya they have adopted the online training of teachers and have noted the scalability of blended learning. With the CBC already in place it becomes easier to commit teachers to the community service learning along with managing the delivery of content. At the same time the unique identity of learners is established, but the challenge remains those students who do not have access to devices. Kenya is now even looking at the options for assembly plants in the country that prioritise educational devices. Accordingly, the government has formed a task force now studying what kind of device can be assembled.

The reform of education in Egypt, known as Education 2.0, started in 2018 with the ambitious plan of transforming the education system in Egypt – meaning curriculum, development, and assessment. Up to K12 the country has around 22 million learners, with 2 million in the technical secondary stage for grades 10 to 12. The idea behind the reforms had been the gradual transformation of curricula, teacher training methods and the means of instruction and greater digitalisation of the system. When COVID-19 hit, some parts of the system were prepared in the sense that there was the already established Egypt Knowledge Bank, developed in collaboration with 26 regional and international publishing houses. Although freely available to all Egyptian citizens, it especially focuses on the needs of students and

researchers. Furthermore, before the pandemic, the Ministry of Education and Technical Education had already implemented electronic assessment of students in 2019 and this continued in 2020 which will be the last year of paper exams. In basic education, over 2 million students were assessed using the electronic system this year. Equally in technical education they are transforming their curriculum to be competency-based to improve the quality of learning outcomes. This is being complemented with new institutions for quality assurance and accreditation of technical education.

Prior to the pandemic, the policy in Egypt was already for greater digitalisation and blended learning. Now this has been accelerated and COVID-19 has focussed minds amongst education stakeholders. This will also be necessarily complemented with objective teacher training and a dedicated academy for assessors. Technical and vocational education has often come with a social stigma and this is another important area in which the government is working to change the social perception of technical education by improving the image through quality.

On curriculum development and assessment reform the Egyptian Ministry of Education worked closely with the European Union on a funded pilot project that provided transferable knowledge to change the curriculum to competency based. In the coming couple of years, they will transform core competencies with a special focus on technical and vocational skills, academic and social competencies, and lifelong learning competencies. The ministry is also thinking in terms of the competency of the assessor given the expansion of evidence-based assessment and then expanding the students e-portfolio with a mixture of formative and summative assessment. The Egyptian reforms are ambitious with much more to achieve in terms of quality assurance, the education culture and legislative reform which mark the beginning of a journey. Another aspect is the activation of a sector skills council that engages with industry and the private sector to better coordinate the prerequisite real-world skills. All this is now taking place in Egypt in a coordinated manner along with international development partners and ensuring leadership in schools; and of course, not forgetting the ongoing digitalisation and expansion of blended learning nationwide.

2.2 Overview

The world is changing faster than ever with skills and competencies required in the future being very different from the ones we all know now. Moving from a knowledge-based curriculum to competency

skills-based is one of the ways in which we respond to the changing global labour needs. Research indicates that many jobs as we know them will not even exist in the next twenty years so preparing citizens to be ready to adapt requires a change in the way education is delivered. When building any new curriculum, one must consider how that will impact teaching methodologies in the classroom and make sure that the required assessment system validates and confirms that the right kind of learning is taking place in schools.

Several countries spoke of how they have been implementing curriculum reform for a few years now, but the change has not been fully reflected in the pre-service training. That means new teachers are coming into the system without the full pedigree required for the competency-based curriculum and so further resources are expended when asking those teachers to have in-service training to keep pace with the curriculum changes.



The past couple of decades has seen policy makers and educators attempting to address the best forms of assessment and to enhance the quality of evaluation, but with COVID-19 we see a renewed sense of urgency in addressing how to evaluate when there is greater use of online and blended learning. This requires new teacher competencies and building their capacities. That said there are a growing number of online techniques to enable teachers to evaluate under different circumstances.

Packaging curriculum reform into continuous professional development (CPD) is clearly a necessity for the reforms to have any impact; both pre-service and in-service need constant attention to nurture the profession. The need to have a structured mechanism for upgrading and retooling teachers to the curricula reform has now been pressured by COVID-19 and urgent need to deliver content and design pedagogies remotely. Generally, pre-service should be easy. It is just a matter of changing or

reviewing the curriculum but in-service CPD requires far more substantial investment, time and not least the desire amongst teachers to change substantially what they learnt in pre-service.

A growing sentiment is that as we work through the ongoing COVID-19 pandemic is a feeling of inevitability of blended learning as an essential ingredient of education delivery in the future. Education has always been delivered in a certain way with the teacher at the heart and the use of any technology has been as a tool to enhance the experience. Often teachers will prefer not to overburden their classroom with ICTs and there is still much debate on how much the expenditure on technology by governments in recent years has truly made a difference to learning outcomes. Now with blended learning, we cannot see the future of education without technology.

A shift to more blended learning also requires redesigning of education policies and the need to address the fact that the role of the teacher is changing, which has exposed a lot of inefficiencies in terms of skills and in terms of technology. For teachers to be compelled to get involved in the technology requirements of blended learning then their governments need to make it clear that this is a necessary part of an overall policy to modernize the education system. Then to make curriculum reforms whereby both the content and assessment are linked to 21st century skills is requiring the teaching professions to completely re-align around blended learning for future competencies.

2.3 Curriculum Reform & Responding to COVID-19

Connecting policy to practice when reforming curriculum raises a number of key issues. Firstly, there is the implementation of competency-based objectives at the classroom level and how to relate continuous assessment with reality. Then integrating aspects such as social and emotional learning or citizenship or extracurricular activities present new challenges in terms of measuring outcomes. Thirdly, is the issue of how to incorporate CBC into pre-service training and then to invert in-service training to account for life skills, social skills, and communication skills. Transforming policy, which often looks good on paper, requires a process of communicating and enabling the environment and the teaching profession to deliver CBC which is not so easily transformed to match the policy. The point being is the resilience of the system is not always readily adaptable to the dynamics of change especially when the required rate of change is accelerated by COVID-19. The danger when implementing such reforms can be a mismatch

between learning outcomes and the assessment process.

The shift to competency-based curricula is necessary to better reflect the world we live in. Learning has changed from being just the world of knowing while sitting at a desk to the world of work and preparing for the digital age while learning competencies and learning vocational skills. This is particularly so without knowing what jobs of the future will look like so creativity and critical thinking are core components. Competency-based learning is about being able to perform and apply knowledge. In Kenya, the first thing they found was having to design an approach for teaching competencies when implementing their CBC. This means new pedagogical approaches, which teachers have not been through and even the designers of the new curriculum did not grow up learning competency-based curricula.

Reform of curricula requires investment in new resources – new books and digital content. The shifting of resources and adaption of pedagogy also needs annual monitoring to demonstrate to stakeholders and to show where improvements can be made. Not least of all it is a complete change for the teacher and a change of the teacher service curriculum. If it is a digital world then you must bring digital competencies which should be applied across the board, including planners and administrators who equally have to get used to going digital, of how they interact and being good digital citizens.

One of the biggest challenges in implementing CBC is teacher reluctance and changing the mindset given that their entire service qualification has been based on delivering content knowledge and the assessment thereof. Often changing the system means changing the people which, apart from being costly, can only really be done in an evolutionary manner. That is not even accounting for the changes required in administration, cultural activities, and the implementation of new competencies such as life skills. In South Africa, in the last few years they have tackled this with interventions during school holidays where teachers are required to attend training sessions, which have been generally well received. Still the change is slow and the cost of furnishing schools with new equipment remains a hurdle.

For teachers to adapt and change to the demands of new competency-based curricula also involves policy makers looking at incentives such as financial or career progression. This then touches on the core issue of budget allocation for teacher professional development. Of course, once trained in new competencies the teachers have the opportunity

for promotion and an increase in salary. Yet it remains important to keep developing such teaching competencies if the curriculum is to retain its real-world relevancy. So, for example the increased need for more online and blended learning requires more training in mastering digital skills, how to deliver lessons online and understanding new pedagogies appropriate for the virtual classroom.

This post COVID-19 landscape is also an opportunity for teachers to be develop new content and the structure of online lessons – much of this might be by trial and error but ultimately successful models will prevail and they can then be incorporated into future competency-based curricula. Another requirement of implementing successful CBC is to bring in more ICT integration in teaching with certified courses for teachers that are scalable and allow for the enabling of competencies using ICT components.

In South Africa, the curriculum reform took place after 1995. It is more focussed on content knowledge and developing abstract thinking skills. Then there are two curriculum streams: one for technical training and the other vocational which utilises more of a competency-based approach. Again, the difficulty is the assessment because when we teach for a test, then the test becomes the curriculum; learners set aside everything else with the demand to succeed in the summative exams.

South Africa has seen various iterations of the school curricula since democracy came over 25 years ago. This has been disruptive to the system as the country started off with a form of competency-based curriculum and assessment, known as the outcomes-based education curriculum. They found it had various limitations so revamped the curriculum 10 years ago and now they wish to return to focussing on competencies as opposed to an academic approach. They have adapted the high school curriculum to account for three streams: academic; technical; and vocational streams. This gives learners more options to specialise when they get older. What they have struggled with in the technical streams is the cost of equipping

schools with the necessary and often expensive technical facilities, laboratories, and appliances. Another potential danger is children deciding to attend technical school but they are still at an age where they do not really know themselves well enough nor what their future aspirations may be so often the learners can end up in the wrong place.

With Education 2.0 and the reforms to curriculum, in Egypt they have devised a detailed strategy and plan for teachers because of the new methodologies that involve more coaching and monitoring of students. Having a new competency-based curriculum means new assessment and with that the need for evidences based on performance criteria for students. The first part of planning thus requires this technical phase to better understand the new tools for teaching competencies. Here it is critical to be considerate of the administrative processes in schools and the need for flexibility given that it means more work during the implementation phase and the keeping of new evidence-based records. Then one needs to determine the certification and verification process which needs to be embedded within the school regulations and requires a program of training assessors.

In Ghana they are in the middle of an agenda that completely reforms the teacher education curriculum as the country shifts to CBC in schools. In the knowledge-based curriculum, teachers become the centre of learning. They are the drivers of learning. They are the deliverers of learning and the children look up to them for everything. But in the competency-based approach, teachers will need to completely change; this is a paradigm shift for teachers in the pedagogical approaches



that they use. So, in Ghana to do this appropriately they have completely changed the way in which teachers are trained and wish to provide them with the opportunity to become facilitators of learning, instead of just being the centre of learning. This shift in mindset, this shift in pedagogical approaches, this shift in orientation takes time. Therefore, efforts need to be put into this by countries that are moving into competency-based curriculum to ensure that you also have teachers who have the skills and have the competencies to really drive this change. The challenge basically is around the fact that teachers went to school using the knowledge base curriculum, and you can only teach the way in which you were taught. That has been the biggest challenge in Ghana. So, at the moment they have changed the pre-service curriculum and are in the process of also reforming the curriculum for training teachers in-service.

Uganda is another country that has implemented a competency-based curriculum. The number of overall subjects has been reduced with the major focus being on practical work and engaging students to use their technical skills more. In this education setting the teacher is more of a facilitator than a lecturer with most of the content being in the form of activities with a link to everyday life such that the student knows how to fit what is being done into the world of work. They have also been integrating generic skills or what some may call 'soft skills' in the learning process which includes how to best apply content and knowledge. Like many countries Uganda has previously prioritised summative assessment but is now accommodating more formative assessment such that learners can get instant feedback.

Making the curriculum smaller does not mean learning less but having a more focussed way of teaching the children can equip them with more robust competencies. The adaption of the curriculum this year has been entirely because of the impact of COVID-19 and the school closures requiring a condensing both of the number of subjects and the amount of content per subject. This is what has been implemented in the Maldives which has also included using the likes of Google Classroom for online lessons. Yet the challenge of how to best assess remains.

The transformation to more competency-based curriculum in Botswana started in 2016 with the development of the education and training sector strategic plan. This has proved to be a huge undertaking, especially regarding teacher training, needing to upskill existing service and change the pre-service training. Botswana now has the National Credit Qualifications Framework which

aims to improve learning outcomes and focusing on competencies that students can perform at all levels.

Cameroon is in a unique situation as the pressure of the COVID-19 crisis came at a time when the country has faced serious challenges with its English system of integration. School attendance is suffering in Cameroon and accordingly the ministry of secondary education is now in the process of making curriculum reform a cornerstone of solving the crisis. Yet one must be aware when applying radical changes in curriculum development then the problem of having enough teachers with the right competencies arises. Therefore, the curriculum reform is a journey that starts from pre-service qualification, though it can be accelerated by employing outside skills.

Namibia started their curriculum revisions in 2015, first with junior primary and then onto senior primary in 2016. Now they are completing the final stages of training teachers at the advanced subsidiary level. In revising the curriculum, they also concentrated on competencies and have introduced pre-vocational subjects to give learners the ability to obtain a skill. Even in core subjects such as English, they try to incorporate activities that assess the skills of learners. The most critical challenge faced when implementing these reforms is the resultant lack of qualified teachers. Introducing new technical subjects means a shortage of teachers in that subject so innovative solutions are needed such as bringing in people, say from industry, who are specifically trained in that subject.

In Zambia where they have been developing their own e-learning platform, they have realised its inadequacies during the pandemic because the curriculum is still designed with the classroom in mind. To deliver the same pedagogy and content from lessons is a huge if not impossible task without adjusting the curriculum. The progression of subjects is not adequately covered when using the digital platform and the problem is worsened during school closures when checking students who have not had connectivity and a digital divide opens. Without the equity in terms of learning means starting afresh. The problem of delivering content via media such as TV or on e-learning platforms that replicate TV programs is how to measure the levels of understanding of the students. Accordingly, the curriculum should be revised to take account of the technology being used.

The implementation of a competency-based curriculum in Zimbabwe was designed for the classroom and now the impact of COVID-19 has meant the ministry of education revisiting the curriculum to account for students having to do

more out of classroom learning. They are now looking at methodologies to better prepare learners in being more independent and having the ability to catch up with the lost learning time. Of course, that level of independence depends on age. For the younger grades who have had their content provided on TV and radio in recent months, they are used to associated what they are learning with who is teaching and presenting the material. Now they are faced with a stranger on TV. Accordingly, the ministry has come up with a module for lessons in guidance and counselling to introduce to the learners an understanding of the current situation and how they are required to pay attention to the lessons on TV and radio given the uncertainty of school reopenings. The existing curriculum reform included plans to reform assessment with less emphasis on summative evaluation over the coming two years but this time period is likely to be extended due to the pandemic and the requisite time required to implement more project-based continuous assessment.

Senegal also has a competence-based approach. This has involved intervention in both pre-service and in-service training for teachers which includes pedagogical advisors visiting schools and districts. Teachers are trained every month and meet twice a month where they may prepare activities and share their understandings of what to put into practice along with advisors who can help determine how to implement new pedagogies in the classroom. Also identifying lead teachers who can support others in implementing curriculum reforms has been part of the government's strategy though they are aware that the cascade model has its own inherent problem of the differential between the knowledge imparted at the beginning and that seen at the end after travelling through a number of people.

Libya has rationalised the curriculum and reduced some content in response to the school closures, with a particular focus on numeracy, literacy, and language skills. Efforts to ensure that more blended learning is taking place have encountered the dual problem of access and parental engagement which are both heavily influenced by income and socioeconomic status.

Once we shift from knowledge-based curriculum to competency-based curriculum, it is the entire system that needs to also change, including the teacher. The teacher must be reoriented into their competency-based delivery and also assessing. The training institutions and the universities also have to change in the way they train. The tertiary institutions offering teacher training need to change their approach so that they emphasise students. Such student-centred pedagogical methods have long been the aspirations of curriculum developers.

We need to utilise more scientific and evidence-based methods when it comes to teaching reforms and to look at the link between learning and the curriculum. From a curriculum point of view, it is necessary to consider the particular learning space that focuses on standards and outcomes. Then there is also the intricate relationship with the assessment component which evaluates the kind of learning that should be happening and provides a measurement standard.

2.4 Tackling the Assessment Conundrum

Any reforms to the system of evaluation and a shift towards competency-based assessment is a huge undertaking. It requires reorienting teachers to have the skills to make project-based evaluation, including the ability to assess how a learner has

developed the required competencies. COVID-19 has seemingly acted as a catalyst, pointing to the need for more formative assessment that is fitting with the demands of blended learning. Such assessment needs to be flexible, to be learner-centric, focussing on ensuring that the student has both learnt the skills and the ability to apply them. An important question remains: can formative assessment be fully objective in the way



summative exams are? Teachers are human beings; they can easily develop favourites or dislikes of students depending on behaviour and other factors that are not academic. The key to this having formal training in the skills of being an assessor and the objectivity it requires in the project-based continuous setting.

Many educators are still adamant that summative assessment gives the clearest picture of whether a learner has achieved competencies or not. That said, amongst participants in the meeting, the general feeling is that the way forward will definitely be formative assessment. It is critical the competency-based learning and reform is measurable, requiring best practices and benchmarking. A number of the conference participants pointed to national differences and the need to avoid falling into a "one size fits all", especially for blended learning policies and curriculum reforms; but all countries will have a new generation of digital learners with new competencies.

So, depending on the country, some competencies may include religion, living a healthy life, employing sustainable practices, and using technology in the media. Defining these as 21st century competencies exposes differences between countries and clearly there is a political element to making judgement of what is and is not appropriate for learners. The political component is that educators must face greater public sentiment when determining competencies and have to make sure that parents and the community accept the modalities of formative assessment.

CBC has brought challenges not just in pedagogy but in assessment. The other question is how to overcome the challenge of large class sizes and the need to give more individual attention to students when applying CBC. This then seems to present itself as a problem of resources and capacity, yet where new investments say in reducing class size are not available then it requires policy makers to be creative. This may involve improved procurement strategies such as leveraging economies of scale by centralising the acquisition of competency-based curriculum books. Furthermore, such an approach can deliver more equity across the country by sharing resources uniformly. Yes, teaching for exams is a challenge to the curriculum itself, forcing the teaching to become based on the tests. So, the strategies used for assessment also need to change if the curriculum is to switch to measuring competencies. If we use the assessment as the driver then that will necessitate teaching differently.

There needs to be a paradigm shift because

ultimately the validity of the grades comes from the summative assessment. Most teachers are trained to teach individual curricula and not competency based. Their emphasis is on delivery of content rather than developing key competencies. In the Maldives there are now eight key competencies which each teacher is supposed to develop through their subjects. This is easier said than done when the pressure is still on to teach the content and then there is the question of how to assess those competencies. That again, is a specific skill that requires specialised assessors.

In response to COVID-19, in Bahrain they asked students to complete tasks as opposed to examinations, during the last semester. These are open book along with using multiple online reference sources. That alone is not enough to verify that students have achieved their competencies. To be sure of a curriculum that is competency-based, then we must have an assessment that truly verifies the standards of the students. This will be one of the ongoing challenges of implementing blended learning. Not forgetting that education is a social activity that requires interaction between teachers and learners which cannot be achieved so extensively with distance learning. To transfer curricula to blended learning and online platforms requires best practices and this can be done with better exchange between countries.

Assessment has been the biggest challenge of COVID-19. Around the world, some exams have gone ahead but most countries have either cancelled or postponed or revised the method of assessment. Reforming the assessment means reforming the curriculum and vice versa. In Zambia, all the assessment is through examinations and not continuous. If a student has not completed specific stages of the course, then they cannot be assessed. Some form of assessing has been done using the e-learning platform in which students can assess themselves with the machine assisted scoring, though this does not contribute to the proper examinations and grading. The plan for next year is to see if such form of 'mock' digital assessment can be upscaled but it would mean changing the assessment criteria and incorporating more continuous evaluation into the system. In tertiary education online assessment has been much more successful but problems arise at the primary and secondary levels where students do not finish the learning or attendances slip. If technology assisted assessment can be adapted, then the first area could be the STEM subjects. This still raises questions over the digital literacy of the students. They may be digital natives but without the right mentoring and teaching to develop their digital literacy they are not used to being assessed online and can easily

fail tasks that would normally be well within their capabilities.

In Bahrain they have had to change the assessment methodology in line with the constraints of the e-learning platform as well as possible concerns over cheating. This has resulted in a 'mixed' assessment strategy which takes into consideration the face-to-face interaction in the school before COVID-19, the in-classroom tests and teacher observations along with the online platform. For the next academic year, the ministry of education is reviewing the results and are determined to come up with the best assessment method for blended learning.

There has been much research in the last decade that shows formative assessment is more effective than summative, but we are yet to see a noticeable global trend in the direction of shifting away from final exams that deliver definitive grades to students. In South Africa they have not gone down the competency-based assessment route yet. Currently they focus on the basic skills and knowledge within all subjects and the competencies they would like to see within those subjects. With COVID-19 they have streamlined some of the curriculum and this has required more teacher involvement in providing continuous assessment when exams cannot be sat. There is still uncertainty to how things will pan out because of the impact of the pandemic, but for the moment students will still need to return to the classroom for their summative evaluation. Furthermore, the teachers are not currently working with learning outcomes and success criteria that are usually embedded in CBC. Any shift in assessment policy needs to have the full participation of teachers whose judgement must be trusted and who need to work alongside policy makers to determine the success of implementing continuous and formative evaluation policies.

In Qatar, the formative assessment is being given more weight for the earlier grades. From grade one to four it is 100% formative assessment. So, it is only based on what students are doing inside the classroom and what learning is taking place there. And then gradually, from five to seven, it turns from 60% formative assessment and with the introduction of summative assessment which is 40%. Then up to grade 12 they have 70% summative assessment and 30% of formative assessment. Critical to all of this is the quality assurance of formative assessment and how to moderate and ensure that the formative assessment which is taking place in the class is reliable and valid. The main challenge they are facing is that the gap between formative assessment and the summative assessment as students get older, whereby they find that the formative grades are

always higher than the summative results, which makes people question the reliability.

To better connect learning outcomes with assessment is the core issue that requires investment into teacher training to better equip them with the skills needed to evaluate competency and progression under new curricula. Many participants in the meeting spoke of this problem how curriculum changes can look great on paper but in practice can be a struggle to implement. A holistic approach requires figuring out how much capacity needs building for the implementation of new curricula ideas and to appreciate the emotional readiness and social and environmental readiness at the classroom level. The willingness and understanding is there amongst policy makers but often there is an under-estimation of what is required to implement the reforms. When it does not work first time, they think they are failing. COVID-19 has certainly made policy makers reflect on the use of technology and how it can assist in making reforms happen.

From a policy point of view then if we accept assessment as the driver then should we reverse engineer such evaluation for the right kind of education? If assessment is to be a driver then it needs to be continually checked and re-checked in terms of delivering the aspired competencies. Does the assessment give us a true picture of the competencies acquired by the learner? This leads back to the need to continuously meet quality assurance standards through regular monitoring.

Another important aspect is joined up government – between basic and higher education to ensure that students achieve the right qualifications both for universities and for labour market. Professional development and capacity building of teachers is clearly a necessary policy if both curriculum and assessment reforms are to be successful in fulfilling their promise. What is critical is ensuring that the necessary quality assurance structures are in place, because when it comes to assessment, we often find that implementing uniform standards and ensuring equality is one of the toughest challenges.

COVID-19 may well have motivated policy makers to discuss reform of assessment and the options available to implement more project-based evaluation, but the reality is that it represents a major paradigm and structural shift which requires time and money. The prevalence of summative assessment policies stems from how such evaluation can test how much the student has learnt and understood which means determining achievement and a measurement of improvement towards key goals and objectives. Furthermore,

the education system requires such academic records and areas of weakness to be identified. All of that said, participants in the meeting pointed to how COVID-19 has highlighted some of the main disadvantages of summative assessment that include the potential to demotivate students; the inability to rectify a problem before it is too late and that such examinations are not necessarily an accurate reflection of learning. For the most part, countries are still committed to the final grade 12 examinations as they are so essential for furtherance into higher education. The culture in most countries and certainly amongst parents is still to focus on final grades.

2.5 Skills, Access & The Social Context

To take the decision to implement CBC is to look to the wider context of the 4th industrial revolution, globalisation, national policy, and the aspirations & requirements of a country. Competency-based learning is not independent of these factors and goes beyond just being about the organisation of education. It is a big decision for governments, and it is an expression of the bigger picture for the country.

Many participants spoke of the need to shift the mindset of learning outcomes. Students need to be taught the ability to self-assess and curricula should have greater emphasis on critical thinking and problem solving. Education needs to go well beyond just information gathering and knowledge attainment but should be flexible and responsive enough to respond to social changes and align with 21st century needs. With a greater policy emphasis on digital literacy and ICT skills, it will be necessary for policy makers to be cognisant of the pitfalls of technology. For example, some research has already shown that artificial intelligence leads to some inherent biases especially those of varying cultural backgrounds or dual-language learners.

Another important ingredient is the necessary understanding of the workplace and the need for close collaboration such that the private sector and industry are engaged in the teaching and learning process. In Palestine this was important when they shifted the competencies within the vocational and technical education curriculum. Students need to practice such skills and have the place to do so, which is only possible by engaging with the industry sector and community in the design of educational programs.

An important lesson that has been learnt in the Maldives is an appreciation of the difference between education theory and practice when conveying new ideas. They have already moved

from knowledge-based content to competency-based and found several things did not work initially. Sometimes it has been a matter of trial and error and to successfully implement CBC requires a strong mechanism for coordination between teachers, students, and parents. For example, the reporting in the previous system of knowledge learning and summative assessment would simply have the grades as the highlight with comments. The grade being the most important component. Yet with CBC it needs a better explainer for parents to appreciate their child's competencies and progression. Parents appreciate this more after a while and seeing several reports rather than just seeing a single grade score. Then there is the variation between traditional subjects and newer competencies such as soft skills, communication skills and social & emotional learning. For example, in mathematics we can have a very simple rubric to indicate whether a student is able to complete equations but for real world competencies it is harder to give a simple and clear picture to the parent – how does one grade leadership skills?



The World Bank has estimated that COVID-19 will equate to 6 months of learning loss. Short-term interventions have included TV, radio, and the use of social media for direct messaging, yet the scale of learning loss is of major concern. On returning to schools it will be critical for leaders to work with communities to find those children, to account for learning loss and work with families who have not been able to be at home (working two or three jobs) all the time to supervise their child's learning. Uganda plans to complete the curriculum next year from October and are using online and television programs to fill the gaps in content provision. Again, the problem is one of access, whereby those in rural areas do not have robust connectivity. This is further compounded with the need to maintain motivation amongst students who are less interested in learning

during the periods of prolonged school closures.

In South Africa, they have had to deal with much more complex social circumstances because of the hangover from apartheid. The history is unique in which an oppressed majority led to two types of education system. The ruling minority took all the white-collar jobs with the necessary qualifications such as university degrees and the majority were stigmatised with the labouring jobs that involve working with the hands as opposed to working with the mind. University places were once the reserve of whites only and since democracy there has been a huge drive for equality in higher education and the respect garnered from graduating with a degree. The technical and vocational careers have been seen as second class to those university degrees and for some it harks back to the 'working with hands' prejudice of the past. Now South Africa finds itself having to persuade its young people that there is nothing wrong in those careers where you make and assemble stuff. The government now fully appreciates the reality and importance of technical and vocational education and of competency-based education as opposed to knowledge-based. In response to this they have developed a strategy offering what they call a 'three streams model of curriculum'. Stream one is for those who wish to follow an academic path for those professions that require academic knowledge. The second stream is technical vocational with an emphasis on electrical, mechanical, and chemical technologies. The third stream is called technical occupation where they build skills around a specific type of, say hairdressing for example.

Now with COVID-19 and the urgency to utilise technology for 'out of classroom' learning and to deliver content online has exposed a worrying digital access divide. Across African and Middle Eastern countries there are considerable wealth inequalities with the super rich at one end and super poor at the other. The affluent schools have been able to adapt quickly because they had the ICT infrastructure in place and the financial means to procure equipment, software, and applications in response to school closures. The majority of populations have had to depend on low tech solutions, with TV and radio dominating the delivery of content. Even where there is good connectivity, the cost of data in Africa is much higher (unfairly) than other parts of the world.

In regard to technical education we need to see an improvement in quality as in some countries it has been neglected. Governments must try to change the social perception of technical education along with greater involvement of employers such that there is equality with general education especially in the

minds of families and their expectations of jobs for the future. They need to see a real difference, see an improvement in quality and witness case studies that demonstrate how private sector investors are participating in technical education.

In Jordan, the current emphasis is on teaching competencies whereby a review of teacher training has already been done and over the last few months the ministry has concentrated on the digital skills of teachers, including linking theory with practice. What also needs close attention is the motivation of students especially if there is more blended learning and they need to manage their time and outcomes at home and outside the normal structure of the school day. Teachers accept that there will be more emphasis on formative and project-based assessment. During the period of prolonged school closures, it has been important to monitor students, with more time spent learning online we need to know how much of the lessons they have followed. Working on parental awareness and good communication with families is now a key part component of blended learning both for the schools and for the ministry of education.

In Botswana they have realised how much the teacher has become the facilitator and guide to the future prospects of a student. This may involve building a graduate profile with their employability and working towards how to make them employable with a toolkit that includes life skills as well as the curriculum. With the expansion of online learning then it is also about developing the student's collaborative skills, communications skills and working as part of a team. Equally, this may be complemented with collaborative teaching, whereby teachers can give each other feedback on how they facilitate more effective learning. The student toolkit has four components: collaboration; critical thinking; articulation; and entrepreneurship. Each of these components is looked at in terms of employability.

Bahrain's response to COVID-19 has been to utilise a number of software technologies and medium to deliver content, including their e-learning platform, Microsoft Teams, recording lessons for TV and making them available on YouTube. Some assessments have been made online in an activities-based format led by teachers. These were recorded electronically and then checked by the quality assurance team from the ministry of education. Depending on the situation with COVID-19, the return to school is likely to involve incorporating blended learning that allows schools to rotate students and reduce class size for social distancing. Some subjects will have reduced content determined by the curriculum specialists; but that does depend on

the nature of the subject as some cannot be reduced. Overall, the study plan remains the same.

Palestine are about to implement intensive training, especially for older teachers, in how to design classes online. In response to COVID-19 they have established an educational TV channel for this period to broadcast lessons given the lack of equity in connectivity. This is being complemented with the development an e-portal by the ministry of education which will be moderated and modified with new learning tasks. The creation of new content is clearly determined by the type of media being used.

In Morocco they see plenty of opportunities arising from COVID-19 and how it can be a catalyst for re-engineering the school format and even rethinking the nature of the education system as a whole. This requires addressing fundamental questions around how to connect reforms with the methodologies in the classroom; how classroom learning can be connected to the wider community; and how to redefine assessments. For this it is imperative to build stronger capacities within the teaching community. If committing to greater blended learning, then engaging with parents is essential for policy makers. Current e-content is often not attractive to students and so parents need to spend more time with their children to teach them the most important skills.



The content requirements for older students are very different, so policy makers need to differentiate between grades and governments need to give more guidance to the parents. Previously, teachers in some countries have been somewhat reluctant to adopt digital tools, but COVID-19 has driven their use more and now strong training is needed to

accelerate recovery and ensure continuous reform of the profession. This now needs to be done in tandem with greater parental engagement in the use of online tools.

There is a difference between schooling and education. Good schooling is curriculum and task driven but looking at education holistically means recognising the importance of parents as being part of the body of instruction. Reforming assessment to be more project-based in the future will certainly require greater engagement with parents. The role of parents as educators brings about its own pedagogical challenges. For example, they may have access to online portal with a great deal of content but do not know how to interpret it or have the educational vocabulary or an understanding of how to measure learning outcomes.

2.6 Closing Syntheses

Note: the closing synthesis was provided by Jane Mann of Cambridge and the final comments from Prof Rose Luckin of UCL

A lot of what we have spoken about is COVID as an accelerator. So, what is happening now is not all because of the pandemic but it has accelerated things. A lot of discussion around that really intimate connection between assessment and every other part of the education system and important points made about the fact that teaching to the test is not something that any educator wants to focus on necessarily, or that any education system should be built around. But there is a natural tendency to try to do it. So, if that is the case, and if we accept that happens, then let us make sure that the testing is right. Let us make sure that assessment is driving the right kind of education so that our learners can develop the right competency-based skills and understanding that they need. If as we understand qualifications are a currency, and one of the things that that currency is used for is to move on to further education, shouldn't we be working more with ministries of education and higher education to make sure that the universities are defining some of those criteria as well and are influencing the way that we change the nature of assessment of our students?

Furthermore, the challenges around competency-based curricula and assessing that kind of curriculum lie very much in the aspects of teacher development. Teachers are coping in many cases with very large class sizes; they are coping with issues around access to technology and other tools. So, if we are looking at models of continuous formative assessment, how can we make sure that the teachers are able to give each student the attention they need to observe

their progress and to recognise the potential that they have. If what we have now is a recognition and transformation towards using technology, then what kind of data do we need to make evidence-based decisions? And what can that be telling us about how we can change the way that we teach and learn to give our students what they need? And, around the quality assurance issues that are tied up in the assessment as well as competency-based teaching and learning and curriculum. So, what can we put in place when it comes to the tools to make sure that we have that quality assurance coming through, regardless of how we are assessing?

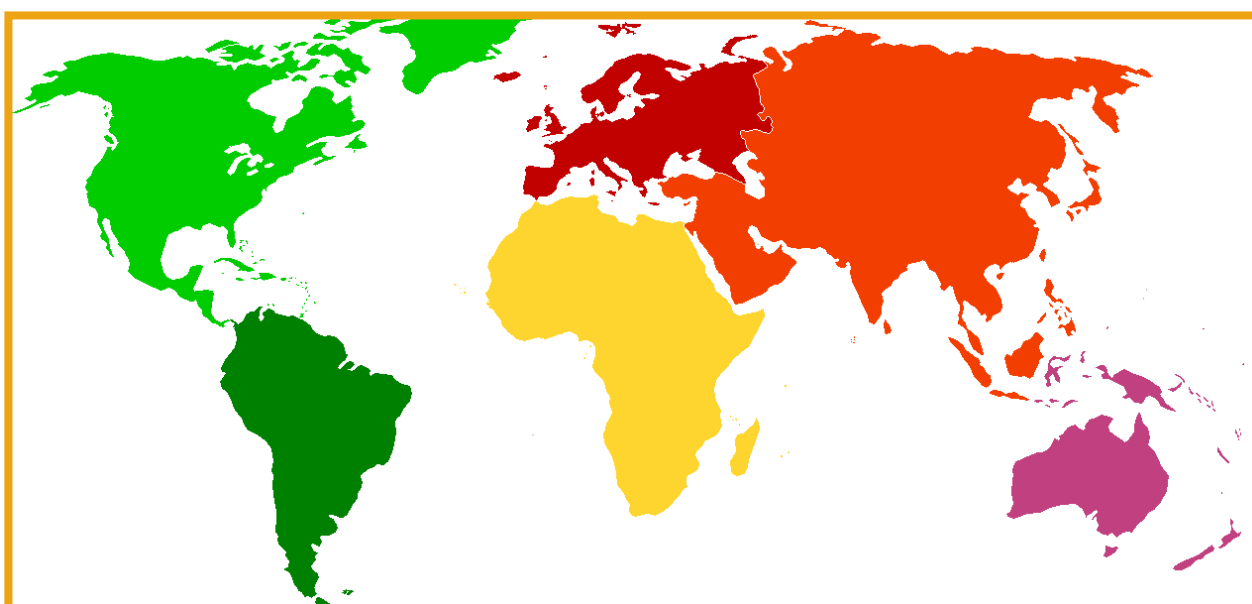
UCL Educate has been working with Cambridge University and wanted to track from the start of the lockdown period, to try and track various different pieces of the educational puzzle and get hold of stakeholders; i.e. to understand more about how education was happening, and then think about how it should be reshaped. Now we work in collaboration with many educational technology companies, so we are particularly interested in the impact of educational technology and the way it is being used effectively. We collected views from these very different groups as we wanted to find out what learning looked like. This was back in April and now we have kept in touch with the group of people throughout lockdown. Recently, we have also been doing interviews and it is interesting to see some of the comments coming out of these interviews, whereby educators are still to really use technology to transform. This is continuing with interviews with educational leaders and educators and now we are entering a phase of interviewing parents as well. Perhaps teachers will become more analytical and begin to question some of the deficiencies within education and also we are hearing some interesting

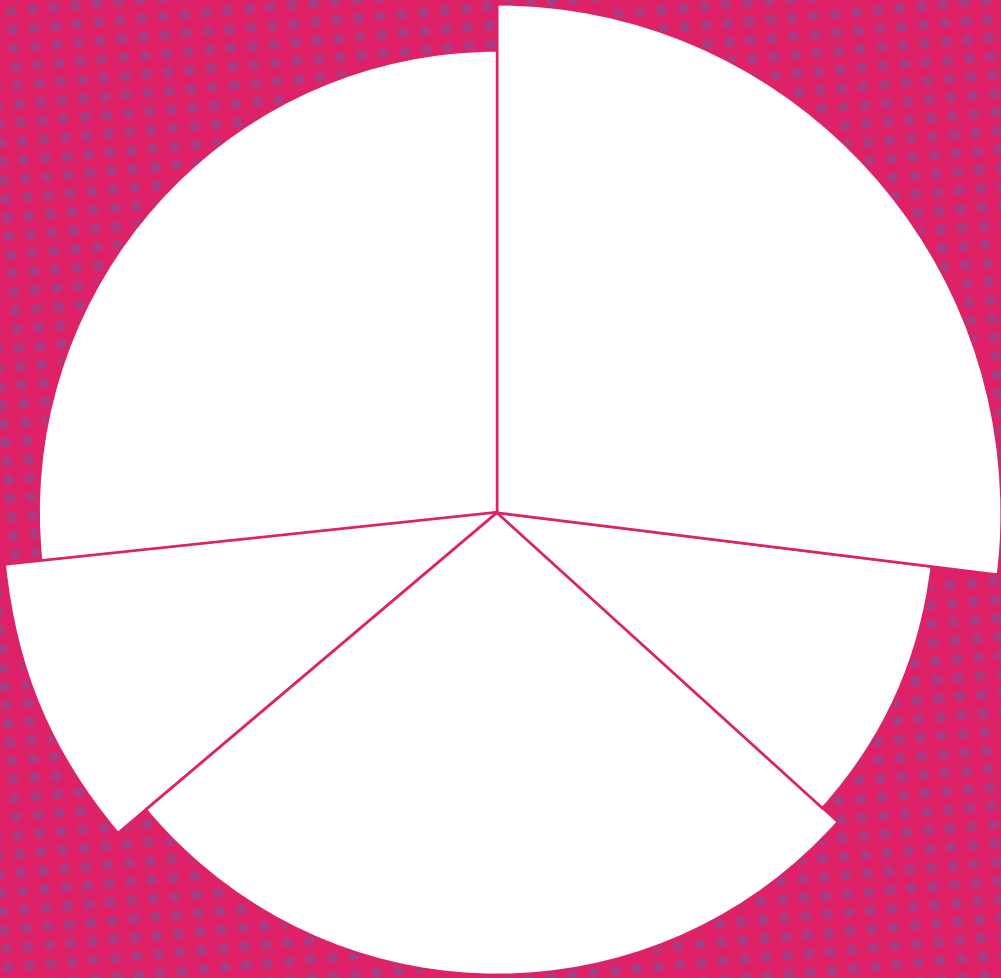
views about what learning could look like if given an opportunity for our staff and our students to use technology in a more profound way. There is certainly a mindset that technology has a role to play, which perhaps there had not been prior to COVID-19.

There is an agreement from across the different categories. So educational leaders, educators, and parents, agreeing that parents are struggling with supporting online learning. Secondly, there is general agreement that at least some of the students who are using remote learning are skipping some materials. Then there is an interesting point about communication between school and home, when you get these different perspectives, and finally just looking at support mechanisms, which are incredibly important across the different stakeholder groups. So, we have educators, educational technology developers, and educational leaders, and there is an interesting difference between where they are getting their support. So, for edtech companies, they are really struggling to get support, with many of them feeling quite unsupported by anybody. That is very nearly 50% of them feeling like that, whereas we have amongst educators a much greater sense of being supported by colleagues and being supported by colleagues is a big factor for educational leaders as well. Supporting those networks of peers and colleagues will be an important feature. This research is still being disseminated and interviews will continue until we have further data which should be published later in the year.

- End -

For further details or copies of this report, please contact john.glassey@brains.global





APPENDICES

COMPETENCY BASED CURRICULUM (CBC) IN KENYA

Developing Empowered and Engaged Global Citizens

BRAINS GLOBAL 12TH AUGUST 2020

John Kimotho

Director Educational Media
Member Global Digital Literacy Council
Member UNESCO Task Force 4.4



Needs Assessment Study

The specific objectives of the study were to:

1. Establish desired the **general needs** for curriculum reform
2. Determine desired **competencies** for all levels of learning
3. Determine the **talent** identification and nurturing strategies to be adopted at different levels of the curriculum
4. Establish desired **content/learning areas/pathways** for a competency based curriculum
5. Identify **resources** suitable for competency based curriculum
6. Determine desired **pedagogical approaches** for competency based curriculum
7. Establish formative and summative **assessment** modes for competency based curriculum



MINISTRY OF EDUCATION



CURRICULUM REFORMS



NATIONAL NEEDS ASSESSMENT

CBC Core Competencies

1. Communication and Collaboration
2. Critical Thinking and Problem Solving
3. Imagination and Creativity
4. Global Citizenship
5. Learning to Learn
6. Self Efficacy
7. Digital Literacy





KENYA VISION 2030 AND AFRICAN UNION VISION 2063

- Sustainable Development Goal No 4 (ensuring quality education)
- Shift towards 21st Learning (Skills and Approaches) hence the core competencies to make curriculum more relevant
- Real world challenges are towards limited employment opportunities. CBC is a drive towards job creations and not depending on employment that does not exist.
- Competencies of digital literacy and learning to learn in CBC prepares learners for career opportunities that don't even exist;
- CBC is about building creative processes and analytical and effective learning for problem solving.

Empowered, Engaged and Competitive Global Citizens

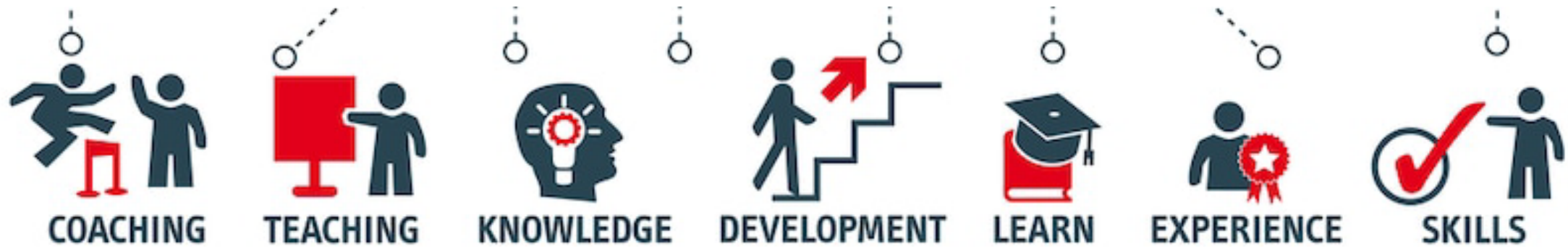
To implement competency-based learning, teachers needed re-tooling to ensure they have the skills to support learners in acquisition of competencies and identify specific learning outcomes of their students?

In-service teacher

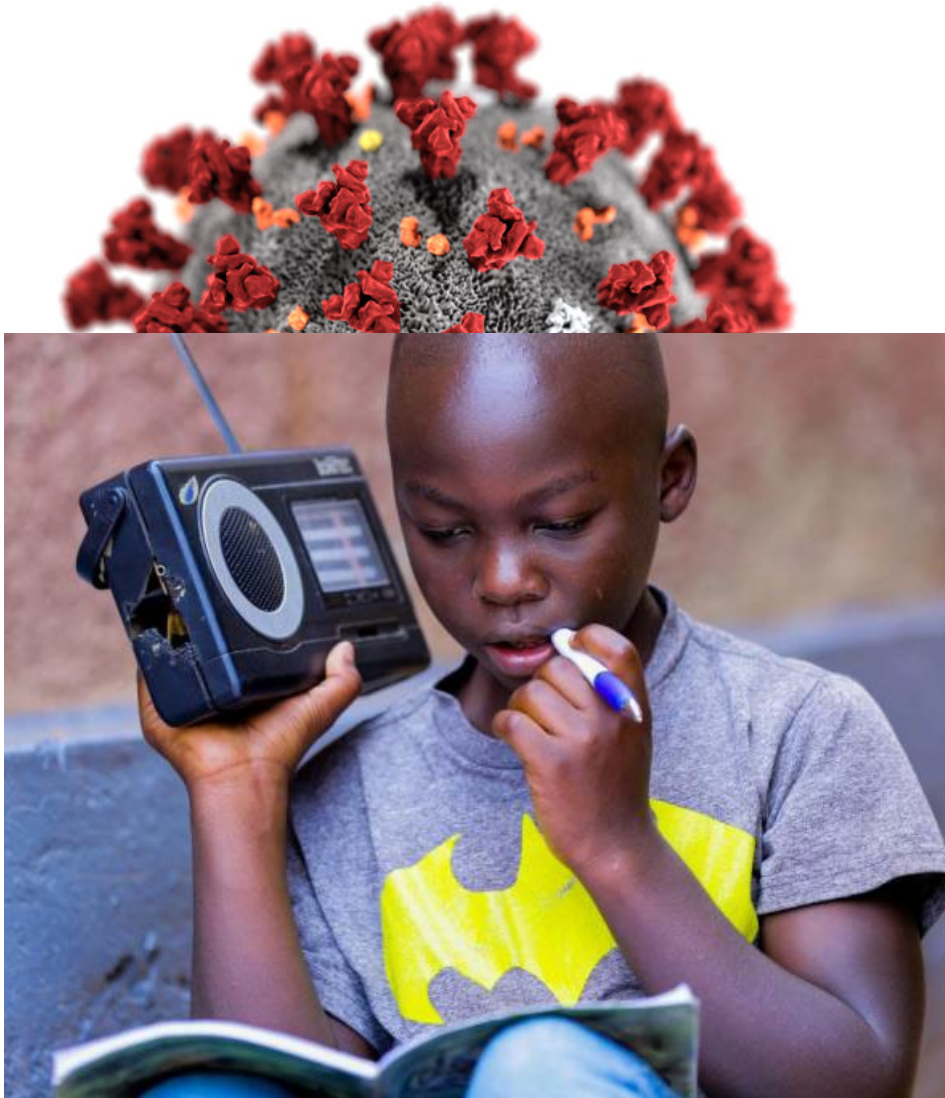
- Emphasis of pedagogical skills & digital skill for inquiry based learning

Pre-service

- Raising the professional level of teachers training from a certificate to diploma level
- Repackaging the teacher training curriculum towards core competencies under the basic education curriculum framework



Empowered, Engaged and Competitive Global Citizens



- Given the impact of COVID-19, Kenya considers that the CBC vision is the same, however, the acquisition of competencies needs a reformed particularly in pedagogical approach.
 - The curriculum designs need re-alignment to blended learning.
- Kenya is only four years into implementing CBC {PP1-2, G1-4}.
- From June 2020 to January 2021 is organization of post-COVID 19 schooling.
- CBC implementation will continue for learners and teacher training. This will be re-engineered to comply to the protocols and policy directives

- Kenya is only four years into implementing CBC {PP1-2, G1-4}.

- From June 2020 to January 2021 is organization of post-COVID 19 schooling.

- CBC implementation will continue for learners and teacher training. This will be re-engineered to comply to the protocols and policy directives

- Main change is likely to be in delivery of curriculum.

- Shift to blended learning in delivery of CBC will help counter dynamic changes that education faces now and in the days to come.





- Assessment is critical to competency-based learning. The re-tooling of in-service and pre-service teachers with emphasis on authentic assessment of competencies.
- The competence based assessment development and review includes practicing industry staff relating the learning to the needs of the future workplace for learners with competence of learning to learn.

CBA Call

- Making assessment more authentic through provision of authentic tasks to learners under CSL.
- Tall call is preparing teachers for CBA that they did not experience during their schooling and training



CBC design is more of formative assessment and less summative examinations. Recently with the impact of prolonged school closure the Kenya National Examinations Council is redefining the CBA with emphasis on **continuous project-based assessment**.

The Kenya CBA with CSL is including projects while away from school using authentic tasks.

- In CBA, authentic assessment tasks reflect real life problems and issues from the world outside the classroom (Home activities, Gardening, Market, SME, Church, Community halls) and have the following characteristics: focus on high order thinking skills.
- involve active performance to demonstrate understanding.
- are interesting and engaging.
- provide multiple avenues for the learner to demonstrate ability, competencies and proficiency.
- promote integration of learning, assessment and productivity.



COVID 19 experiences calls for continuous twinkling of CBC designs, reform CBC delivery to blended learning and compliance of CBA. This will build greater resilience into the system.

To ensure the teaching profession can implement the critical agenda items calls for:

- Synergy among the government agencies that deal with education; KICD on CBC, KNEC on CBA and TSC on continuous teacher re-tooling.
- Simultaneously CBC & CBA repackaged for implementation and get teachers retooled. In addition, appropriate mentorship and support at all stages.
- Already efforts are in play to enhance competencies of teachers to engage learners on online platforms which are principal part of blended learning.

Kenya preparedness to blended learning

- Education Cloud in place
 - Curriculum content access and online teacher training tested
- Easily scalable
 - Seasonal ability to “Scale Up” or “Scale Down”



- Easy to manage and adopt to situations such as COVID 19
 - Install, uninstall, change, undo in bulk quickly and without problems/downtime
- Unique ID that will follow students and teachers throughout their education lifetime.



CBC Blended Learning

1

Government policy and stakeholder coordination

2

Community acceptance of blended learning
**Teacher learner contact + Technology learner contact =
Curriculum deliver**

3

Fit for purpose learner and teacher device, local assembled and maintenance. Content access, learner digital ID and real time learning assessment

4

Monitoring, review, upgrading and resilience building



**THANK YOU
COMMENTS & DISCUSSION ...**



Kenya Institute of Curriculum Development