GOLA!

GLOBAL ONLINE LEARNING ALLIANCE

REPORT ON GOLA VIDEO CONFERENCE – 24 JUNE 2020

TEACHING, PEDAGOGY & ASSESSMENT
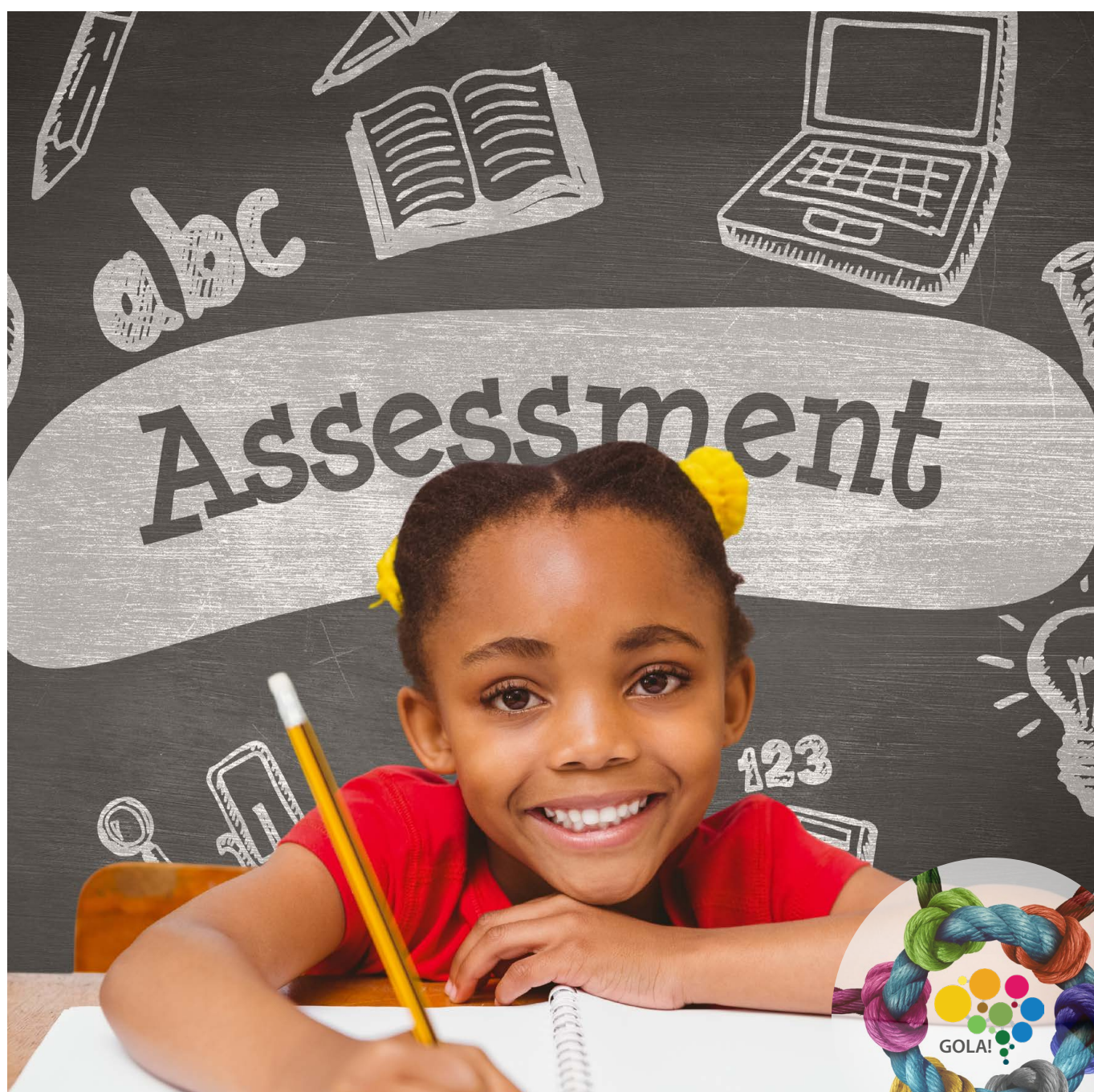
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GOLA Report

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FORMAT &
PARTICIPANTS

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1.1 Introduction

This report of the Global Online Learning Alliance (GOLA!) of the private government video conference on teaching, pedagogy and assessment followed in the footsteps of the previous events that discussed the challenges and efforts to find solutions in response to the worldwide school closures due to COVID-19.

Earlier findings of policy makers addressing both short-term continuity and long-term sustainability of education could be grouped into three main themes:

Teaching, Pedagogy & Assessment

Policy, Planning, Financing & Collaboration

ICTs and Digital Learning

In our previous report we found a sentiment amongst participants of "silver linings" from the challenges of COVID-19 and how they can be turned into opportunities for better delivery of education services. Reforms are needed and strong collaboration amongst teacher unions, governments, schools, learners, the education industry, and families will lie at the heart of future strategies.

Here we address teaching, pedagogy, and assessment. Blended learning now needs to take centre stage in teacher training. The crisis has brought into question the role of the teacher. Technology will not replace the teacher but those with digital competencies will certainly substitute those without such skills. Teachers are more than just content delivery systems but are faced with many complex issues, so support and guidance in the continuous professional development (CPD) is essential.

Assessment is a conundrum for policy makers who are committed to ensuring "no harm is done to students" as a result of COVID-19

yet the crisis has occurred at a time of year when schools, universities and students have been preparing for annual examinations. The ongoing debate of summative assessment against formative project-based assessment has been especially highlighted by the current circumstances.

Hence, the GOLA video conference of 24 June 2020 was organised into two main sessions:

TEACHING: Policy recommendations for best practices in embedding blended learning into teaching, continuous professional development, peer-to-peer collaboration

ASSESSMENT: Impact of COVID-19 on assessment; formative and summative assessment practices, new metrics, improving learning outcomes.

In advance of the video conference several issues were outlined for participants to discuss:

How might we integrate additional competencies into being part of the learning outcomes conversation?

How do we identify and introduce effective and systemic teaching practices with the incorporation of learning technologies?

Is there consideration of further reforms to curricula to incorporate blended learning?

How do we prioritise the relationships between teachers, students along with parents who have suddenly become more involved in the supervision of their children's education?

How might we define new competencies to be included in teacher qualifications in the future?

How will teaching policies include the need for remote and blended learning skills as part of continuous professional development?

How are we working with stakeholders such as schools and teachers' unions to now embrace digital technologies?

Do we now need "learner policies" to ensure that students better understand their own personal responsibilities and safety while learning online?

How has the COVID-19 crisis shifted the emphasis between formative and summative assessment in the future?

What policy recommendations do we have regarding using technology for online assessment?

What role can solution providers play in countries to better design content delivery technologies that also have the capacity for interactive assessment?

These questions represent a sample of the meeting that endeavoured to produce appropriate policy recommendations and response strategies as educators tackle the challenge of forthcoming school re-openings.

1.2 Format of Video Conference & this Report

In section 1.3 we list the participants of the third GOLA! video conference. The most immediate lesson of online conferencing is to ensure that every participant has a voice. Small groups are essential. There were 95 participants and so the video conference was structured to ensure that the bulk of the time was dedicated to small break out groups – giving everyone their voice. The following was the conference structure.

Opening statement: Andria Zafirakou, 2018 World Teacher of the Year.

Break Out Session 1: TEACHING. Policy recommendations for continuous professional development, peer-to-peer collaboration, best practices for embedding blended learning into teaching.

Synthesis: Summary of session 1 by expert synthesisers

Break out session 2: ASSESSMENT. Impact of COVID-19 on assessment. New world order – formative or summative assessment? Improving learning outcomes.

Synthesis: Summary of session 2 by expert synthesisers

The total time of the video conference was 170 minutes

After introducing the participants in 1.3, the format of this report is structured around the key findings. During the private break out groups we record and transcribe everything which is then disseminated into this official report. **None of the quotes in the break outs is made attributable to any one person.** The participants hold senior positions in government, multilateral agencies and IGOs across the world.

In section 2.1 we give an abstract of the key findings of this GOLA! video conference and the remainder of the report further examines these issues according to the experiences of the meeting participants.

1.3 Participants & Acknowledgement

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 and equally we wish to thank those who moderated, and those behind the scenes taking notes and providing tech support. Everyone committing their time during such a testing period is a true testament to their desire to ensure the primacy of education. Participants are listed by country, alphabetically:

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

ANGOLA: Gabriel Boaventura, National Director for General Education, Ministry of Education

ANGOLA: Nzinga Nicolau, Head of Department for Cooperation, Ministry of Education

ARGENTINA: Juan Pablo Lichtmajer, Minister of Education, Ministry of Education, Tucuman Province

ARGENTINA: Maria del Huerto Pini, Advisor to the Government of Santa Fe. GOLA Organiser

ARGENTINA: Nicolas De Mori, Vice Ministry of Education Planning, Ministry of Education, Córdoba

AUSTRALIA: Maree Nielsen, Executive Director, Queensland Department of Education

AUSTRALIA: Neil McDonald, CEO, Queensland Education Leadership Institute

AUSTRALIA: Dr Phil Lambert, Director Phil Lambert Consulting, University of Sydney & Former General Manager Australian Curriculum. *Moderator*

AUSTRALIA: Louka Parry, Founder & CEO, The Learning Future & Executive Committee Member, Karanga. *Moderator*

BELGIUM: Bart Verswijvel, Senior Advisor, European Schoolnet. *Moderator*

CANADA: Martyn Beckett, Special Advisor, Ontario Ministry of Education

CANADA: Sebastian Franks, Director Lead, Strategic Initiatives, Strategic Policy and Programs Division, Ontario Ministry of Education

CANADA: Jennifer Adams, CEO, Educating Leaders Consulting & Executive Member, Karanga. *Moderator*

CANADA: Giancarlo Brotto, Cofounder & Executive Director, Catalyst. *Moderator*

CANADA: Jenna Pipchuk, Executive Vice President, Smart Technologies. *Expert Synthesiser*

COSTA RICA: Manolo Roja Mata, Director, Ministry of Education

ECUADOR: María Isabel Maldonado, VICE Minister of Public Education, Ministry of Public Education

EGYPT: Dr Inas Sobhy, E-Learning General Director, Ministry of Education

EGYPT: Essam Awad Gooda, Professor, Alexandria University

FRANCE: Annemijn Perrin, CEO, Digital Skills Foundation. *Moderator*

HUNGARY: Adam Horvath, Division Director, Centre for Digital Pedagogy & Methodology

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

JORDAN: Dr Najwa Qbelat, Secretary General for Administrative & Financial Affairs, Ministry of Education

JORDAN: Dr Yosef Aboushaar, Director of the Directorate of Planning & Educational Research, Ministry of Education

JORDAN: Lama Al Natour, Head of Development Coordination Unit, Ministry of Education

JORDAN: Eng Ruba Omari, Director, Quen Rania Al Abdullah Centre for Education & Information Technology

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

KENYA: David Njengere, Advisor to Minister & Head of Curriculum, Ministry of Education

KENYA: Dr Sara Ruto, Chairperson, Kenya Institute of Curriculum Development

KENYA: John Kimotho, Director of Educational Media, Kenya Institute for Curriculum Development

LEBANON: Nisha Makan, Advisor to the Director General, Ministry of Education and Higher Education

LEBANON: Prof Mayssa El Nayal, Dean of Faculty of Human Sciences, Beirut Arab University

LEBANON: Prof Sobhy Abo Shahin, Dean of Student Affairs, Beirut Arab University **LEBANON**: Prof Maha Abo Al Alla, Director of Quality Assurance, Beirut Arab University **MALDIVES**: Hon Abdulla Rasheed, Minister of State, Ministry of Education

MALDIVES: Mrs. Shuhudha Rizwan, Education Development Officer, National Institute of Education

MALDIVES: Mrs. Niuma Mohamed, Education Development Officer, National Institute of Education

MEXICO: Esteban Moctezuma, Minister of Public Education, National Ministry of Public Education

MEXICO: Juan Alfonso Mejia, Minister of Public Education, Sinaloa Ministry of Public Education

MEXICO: Juan Carlos Flores, Minister of Public Education, Jalisco Ministry of Public Education

MEXICO: Yoloxochitl Bustamante, Minister of Public Education, Guanajuato Ministry of Public Education

MEXICO: Patricia Vázquez del Mercado, Radix Education. *Moderator*

MEXICO: Cristina Cardenas, CEO, 3C Innovation for Human Development. *Moderator*

MOROCCO: Elarbi Imad, President, Centre for Civic Education

MOROCCO: Mohammed Elmeski, Clinical Associate Professor, Arizona State University

MOZAMBIQUE: Kauxique Maganlal, Adviser to the Minister, Ministry of Education and Human Development

MOZAMBIQUE: Lourino Chemane, Adviser to the Minister & CEO of MoRENet, Ministry of Science & Technology, Higher & Technical Professional Education

MOZAMBIQUE: Prof Eugénia Cossa, National Director of Higher Education, Ministry of Science & Technology, Higher & Technical Professional Education

NAMIBIA: Marcus Mbambo, Professor, University of Namibia

OMAN: Dr Zuwaina Almaskari, Director General for Education Evaluation, Ministry of Education

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

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

PERU: Luis Velasquez, Director, National System of Evaluation, Accreditation and Certification of Educational Quality

PORTUGAL: Mário Franco, Founder, Millennium@Edu Sustainable Education & GOLA Founding Partner. *Moderator*

QATAR: Reema Abu Khadijah, Director of Directorate of Schools Curricula, Ministry of Education and Higher Education

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

QATAR: Rawda Al-Zaidan, Director of Directorate of Private Schools Affairs, Ministry of Education and Higher Education

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

SAUDI ARABIA: Dr Ali Alrubian, Member of the Directorate of Research and Innovation, Education and Training Evaluation Commission

SAUDI ARABIA: Jawara Gaye, Lead Education Specialist, Islamic Development Bank

SPAIN: Cesar Herrero, Pedagogical Advisor, National Institute of Educational Technology & Teacher Development, Ministry of Education

SPAIN: Mirian Olga Cecilia Martinez, Head of European Projects, National Institute of Educational Technology & Teacher Development, Ministry of Education

SWEDEN: Peter Karlberg, Director of Education, Skolverket – Swedish National Agency for Education and Training

TUNISIA: Prof Mohamed Jemni, Head of ICT for Arab League Educational, Cultural & Scientific Organisation (ALECSO). *Moderator*

USA: Kevin Johnstun, Education Program Specialist, U.S. Department of Education, Office of Educational Technology

USA: Darla F. Strouse, Executive Director, Maryland State Department of Education

USA: Stan Freeda, State Educational Technology Director and Digital and Online Learning Specialist, New Hampshire Department of Education

USA: Jennifer Patterson, Assistant Superintendent – Office of Teaching, Learning, & Assessment, Oregon Department of Education

USA: Carmen Xiomara Urbina, Deputy Director, Oregon Department of Education

USA: Dan Farley, Assessment Director, Oregon Department of Education

USA: Carla Wade, Digital Innovations Lead, Oregon Department of Education

USA: Ashlee Pickerell, Executive Assistant, Oregon Department of Education

USA: Denise Pearson, Vice President of Academic Affairs and Equity, State Higher Education Executive Officers Association (SHEEO)

USA: Joanne McEachen, CEO, Learner First & Executive Member, Karanga. *Moderator*

UK: Andria Zafirakou, 2018 World Teacher of the Year & Deputy Headteacher, Alperton Community School. *Expert Synthesiser*

UK: Prof Stephen Heppell, Filipe Segovia Chair of Learning Innovation at the University of Camilo José Cela, Madrid. *Expert Synthesiser*

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

UK: John Glassey, CEO, Brains Global & Founder GOLA. *Conference Chair*

UK: Claire Urie, Head of Government Relations, Brains Global. *Moderator*

YEMEN: H.E. Abdul Salam Al Joufi, Former Yemen Minister of Education & Advisor Arab Bureau of Education for the Gulf States

YEMEN: Marwan M. Al-Falah, Program and Activities Officer and Coordinator of the Education Unit, Human Group Organization for Relief & Development

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

OPENING COMMENTS

SECTION 2.

Opening Comments

Here we present an abstract of the key findings, a summary of the opening statement and a breakdown of the key discussion areas by subject matter, bearing in mind the overlap between issues and the necessity to retain an overall holistic view of education and teaching.

2.1 Abstract of Key Findings

The key findings of this meeting of the Global Online Learning Alliance (GOLA) into teaching and assessment demonstrate a growing call for the implementation of more blended and hybrid learning and specially to ensure greater equity in education. To implement new policies for teaching, pedagogy and assessment will require substantial investment in building capacity, training, and the engagement of all stakeholders from the school to the home to the community and the unions.

Nearly every participant emphasised the lesson from COVID-19 was not to go back as we were before and some even expressed policy in terms of an entire rethink of the education system as a whole and a re-engineering of the school format. New frameworks for teachers will need to include online learning and possibly the certification of digital competencies along with standards and regulations – all aimed at being able to identify the progression of learners.
Notably, participants in the meeting put a strong emphasis on critical thinking and problem-solving aligned with 21st century needs. This includes greater digital literacy and skills, the ability for students to self-assess, better communications and life skills along with a commitment to social and emotional learning. In doing so policy makers must provide certainty for families and students during uncertain times.

Assessment is an issue that has been brought into sharp focus by COVID-19. Participants spoke of needing to ask the purpose of assessment and whether it needs re-engineering. Is learning really
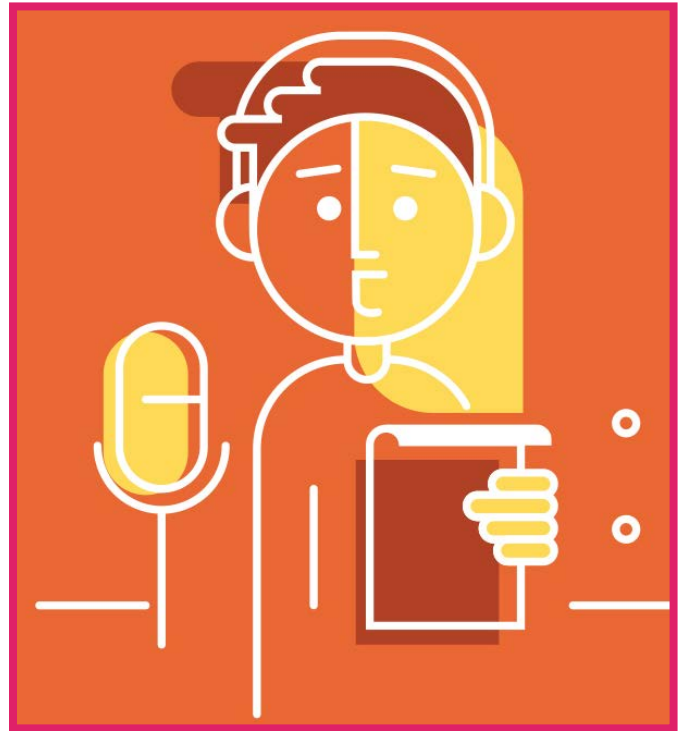
happening and are current forms of assessment readying our children for real life skills? If formative assessment is going to play a greater role then it requires trusting the judgement of teachers and empowering them to lead project-based learning collaborations.

Some discussion included the benefits of ICTs in assessment, for the observation and monitoring of student progress, useful for collecting data on learning as well as being effective tools during times of school closures. Yet, this comes with strong caveats in terms of the interoperability between applications, the lack of uniform industry standards and the dangers of biases built into new technologies, as has been found with AI – which cannot replicate the ability of teachers to judge facial expressions and body language.

Seemingly there is a growing trend in favour of formative over summative, but many participants were cautious in expressing the need for balance and to account for the impact on progression such as reaching targets like a university education. Ultimately, delegates were keen to see a system based more on growth than just numerical measurement and to better inform students of their educational progress along with enhancing their personal interests, preferences, and support of extra-curricular activities.

2.2 Opening Statement: Andria Zafirakou, 2018 World Teach of the Year

With much talk of policy makers needing to consider the upskilling of teachers in new technologies for delivery lessons online and the embedding of blended learning into continuous professional development (CPD) and pre-service qualification, the GOLA organisers thought, what better than to hear from a teacher on the frontline – Andria Zafirakou, 2018 World Teacher of the Year.

Of particular emphasis in the opening statement was the fundamental motivation of joining the teaching profession, being the daily engagement with young people and how interaction between teacher and students is an essential part of the teaching and learning process. Classroom interaction stimulates the students' involvement, is indispensable to the pastoral care of young people, is integral in improving peer-to-peer relationships and makes a key contribution to the inherent discipline required in childhood upbringing.

The importance of the structure of the school day and front of classroom teaching now sits alongside the increasing demand for the use of ICTs for education, online learning, and new technologies to compensate for school closures and out of classroom learning. Andria identified the current challenges faced by the teaching profession, opportunities arising from these challenges and preparations for returning to school as we look forward to re-openings.

Amongst the many challenges, inequality is of concern. Those who are disadvantaged and further behind are in need of the attention and professional help of teachers. Inequality may present itself in the form of the social background and education of the parents who have become responsible for supervising children and also income inequality has a considerable impact on access to technologies, online services and devices – a new digital divide. Pedagogy is a very different matter when teaching online. Teachers have adapted to online technologies and how they can be best accommodate both the curriculum and their own style of teaching. This then influences the quality of lessons and the work produced.

The interaction between teacher and pupil is fundamental to pedagogical practices and that loss of relationship effects motivation. Students, without any preparation, are being asked to self-manage their learning time and planning; equally teachers need to maintain the drive and impetus that is the essence of their profession. Any sudden loss of relationships, as children are also experiencing from missing their school friends, will have often subtle consequences on mental health.

While everyone has been trying to adapt to online and out of classroom learning, the closure of entire assessment programs has proved particularly challenging. For those in exam years, they have built up expectations and worked hard in preparation for end of year exams, only for the rug to be pulled from under their feet.

From such challenges, some opportunities have emerged. For the teaching profession, such openings exist in the building of virtual teacher professional development and upskilling in technologies for blended learning. There are of course opportunities for developing new pedagogies for online learning, but these will require robust guidelines and regulations that provide accountability for both students and teachers.

There is the potential of advancing new forms of online assessment that can be formative and project-based that gives teachers a continuous appraisal of student performance. In the last few months, we have seen an upsurge in global conversations that have improved trust amongst stakeholders and the entire education community is taking a long, hard look at the future models of assessment.

As the teaching community prepares for school re-openings, questions remain over when school classrooms return to normal; what will happen with classroom sizes given the demands of social distancing; will it require subjects being prioritised and some lessons being reduced substantially, such as music and physical education? Will this mean reducing the content in the curriculum and what impact will that have on future standards and assessment?

This is clearly a critical time in which teaching practices may need to be reshaped, curricula will be refined to adapt to blended learning and calls will be made for an increase in public sector investment in teacher professional development at a time when governments face huge debt burdens and increasing economic concerns as a result of COVID-19. It is important that policy makers remain cognisant of the effects on mental health and well-being along with ensuring progress for young people remains at the heart of education – academic progress, career progression and social development.

Andria's outstanding message was that we must have confidence in our teachers. We must let them do what they do best, they have the knowledge of their students and are best place to build a strategy for each of them.
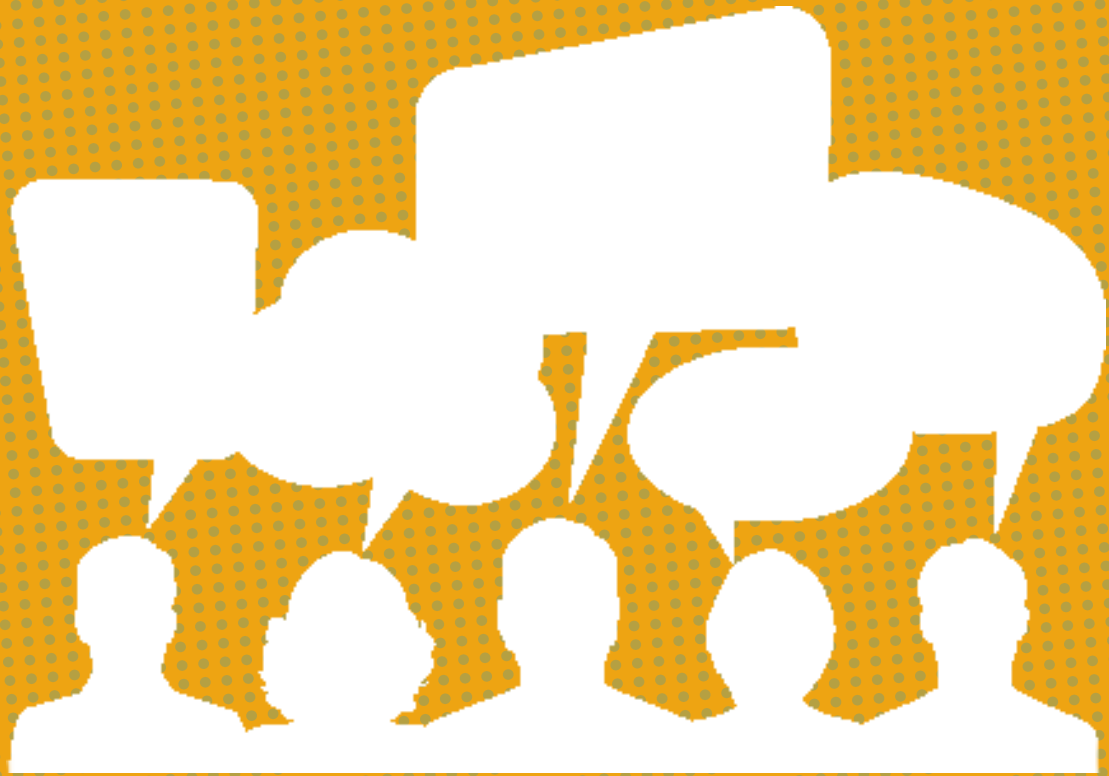
TEACHING & PEDAGOGY

Teaching & Pedagogy

In the first break out session of the meeting, participants were invited to address a number of key issues that have arisen from the experiences of the school closures and the impact it has had and will have on the teaching profession in the future. Notably, with the clarion call for investment of resources in blended learning methodologies comes the requirement for upskilling of teachers in the necessary technologies and the art of producing lessons online.

The delivery of virtual lessons is a very different form of pedagogy than the interaction of front of classroom teaching that lies at the heart of all teacher training qualifications. So, participants were asked to address the questions of recommending digital competency to be included in future teacher certifications; should remote learning skills be a necessary part of continuous professional development (CPD); reforming of curricula to incorporate blended learning; and the necessity for "learner policies" to ensure that students have a better understanding of their own personal responsibilities and safety while learning online.

3.1 Scenario Planning

School closures since mid-March have meant that over 60% of the world's student population have been impacted. The immediate challenges of delivering educational content have predominantly incorporated using online, TV and radio, in some cases an ad hoc response and in others an extension of their existing blended learning strategies. As well as immediate response strategies, ministries of education have started planning new actions with schools and teachers to ensure short-term continuity and to be ready if a situation like COVID-19 occurs again.

In Jordan, where they closed schools on 15th March, the country offered lessons on TV and then a week later used their online platform NoorSpace. This involved filming video lessons with teachers and using them in broadcasts.

Then a few weeks later produced virtual classroom using MS Teams such that teachers could have interactive contact with their students. Here, as in all countries preparations for re-openings have included the necessary cleaning measures and disinfecting schools. The final decision on full return to school must account for three possible scenarios for the new school year:

- Every child returns to school in person
- A rotating system with 50% of students in class at a time for 2-3 days and blending with home learning
- The effects of the COVID-19 crisis lingers to such an extent that all learning remains online

In Spain they did a lot to help teachers and students deal with the school closures and have been planning new actions for when school restarts to switch to distance learning if need be. They have been gaming different back to school scenarios with consideration of key factors such as the contact between pupils returning to school, new practices for teachers to implement social distancing and meeting in smaller groups.

In many countries, the extended summer holiday period is now underway and so the

school year is now over until returning at the beginning of September. As well as planning for health and well-being, there is the pedagogical concern of ensuring teachers can deliver quality education and that lost time, especially for those disadvantaged is made up somehow. In Canada they have also been preparing in the context of the above three scenarios but given the uncertainty it may require a mixture of strategies, so ministries of education need to be flexible. Everyone needs to be ready for a potential resurgence in COVID-19. One notable exception has been Sweden in which they did not shut down school at all for under-16s. The government has decided the return to schools for 16 to 18 years olds will be mid-August.

Mexico is a country with a very broad spectrum of schools and large variance between the well-connected urban areas and the poorly connected remote and rural areas. The larger schools in bigger cities have had about 65% connectivity and so the State ministries have been using TV to provide content throughout the day. The use of messaging applications has resulted in up to 80% of students receiving materials via their cells phones, accordingly this requires making the materials lighter in content and more mobile friendly.

Morocco's shut down of schools from 20th March resulted in the immediate use of three TV channels providing educational content all day. The early provision of lectures through TV, online and mobile devices had no interactive component, but the ministry of education soon caught up and has since extensively used MS Teams and Google to ensure better social connection between the teachers and their learners. This required doing a deal with the telecommunications operators who have allowed free access to the online learning platform.

For the last 19 years, the State of Oregon has had its own edtech group and they pulled these people together at the beginning of May. They now use Google online with daily tips and discussion tools, such as how to use the learning management system.

In Lebanon, prior to COVID-19, distance learning had very little recognition, yet now its greater usage has resulted in learning projects which are 50% online and 50% face-to-face. Their evolving strategy has been to start incorporating blended learning in an overall hybrid approach to ensure continuity, which will segue into a long-term blended learning scenario.

The ministry of education and higher education in Qatar has given parents devices for children to assist them in distance learning. In supporting teachers on how to design appropriate content for students they have learnt that the learning resources must be regular and consistent. The ministry transferred much of the educational content online with little difficulty in converting to a virtual format, but this exposes that the need for human interaction lies at the heart of education.

In Oman, the ministry of education started to work with Moodle classroom, but it is not a bespoke solution and it is recommended that each country should have its own platform suitable to its needs. This raises the question of what type of online content is provided to students. Teachers have started to put their own lessons on the platform, but video lessons without interactivity are not enough.

The State of New Hampshire has been working to build online courses and is trying to add new skills to the current curriculum. They have created a learning alliance to streamline professional development and are currently assessing the needs of both teachers and schools as they return to classrooms and a blended environment. There is very much a sense of wishing having acted in ICT for education many years ago.

Zimbabwe is engaging parents through radio and newspapers. The ministry of primary & secondary education is working on an online education platform in partnership with Econet Wireless. Currently about 1.6 million learners are using their online platform. Lessons for TV are still under development. Schools are going to open at the end of July, and in a few weeks will start to broadcast lessons on TV. From the day the schools closed they have prepared lessons to continue where they left off. Schools have reached out to parents directly through email and WhatsApp. Any problems with

connectivity and they make announcements through the radio.

In Spain, the national TV channel has a whole morning dedicated to lessons and the government is working with the TV companies to collect metadata. The government has also come to agreement with the three main mobile operators to provide 4G, especially to disadvantaged children. They remain acutely aware that investment in infrastructure is a priority to avoid a digital divide. Overall, they admit that the country was unprepared.

In Qatar they have used a mixture of technology during school closures, both online and utilising a dedicated TV channel for broadcasting lessons. Qualified teachers prepared virtual lessons, supervised by the ministry of education and higher education, and have distributed these to all schools for all subjects at all grade levels.

3.2 Challenges

The experiences of the school closures highlighted a series of challenges that needed immediate attention to ensure continuity in education, the participation of students and quality contact time between teachers and learners.

Although countries have utilised three main types of media, TV, radio and online, the biggest concern centres around the engagement and participation of students and the reduced access for those in rural and remote areas. This danger of an accentuated digital divide means that COVID-19 must now be a catalyst for equity and an accelerator in the use of technology.

A challenge in some countries has been an agreed system of embracing blended learning amongst all stakeholders. Teacher unions are amongst the most powerful of the many stakeholders and, for example in Canada, they have expressed their concerns about synchronous learning, preferring asynchronous. The provincial ministries are still working with unions to better improve the skill levels of teachers and build overall teaching capacity.

One of the most notable challenges of virtual learning that participants identified was how to engage children online and keep them stimulated. This is clearly a pedagogical issue that policy makers need to address when producing online learning guidelines and strategies – it is not just about the use of ICTs and digital competency but the addressing the very nature of the virtual learning environment, its benefits and its limitations; and especially so a clear differentiation from in-classroom learning.

The main challenge of all countries has been the delivery of content with interventions in radio, TV and the online. The challenge is in ensuring is it in line with the school curricula. Anxiety is prevalent amongst households and although radio and TV are being used to deliver educational content, the very same households are watching and listening to stories about coronavirus. This view was reflected in Ecuador where there is lack of access for many students in rural communities. Planning for students without the access and technology is especially challenging.

In the Maldives they have used Google classroom for some time, but the concern is to what level have teachers adapted to digital learning. Teachers are now participating in regular training meetings and plans for the coming months involve a hybrid of face-to-face

school teaching and distance learning. Although schools are yet to re-open, when they do it will be the first-time children meet their friends in many months and how they interact remains a big unknown. This will represent further challenges for teachers. A strategy for coping with this in the Maldives involves reducing the curriculum by 50% such that teachers are not faced with the monumental task of playing catch up.

Where COVID-19 has highlighted deficiencies in teacher ICT skills, such lack of competency can have a substantial impact on teacher confidence who need to know how students are progressing and what advancements are being made in the learning journey.

For most developing countries, the fundamental challenge remains one of access. For example, in Angola, they simply do not have the connectivity nor the digital materials in public schools. Classrooms in some schools are very over-crowded with 45-60 students at a time. How is this going to be dealt with alongside the demands of student well-being and social distancing? The concern is the retention rate of students and the dangers of pupils dropping out from the system altogether. Evidence from previous crises (such as financial and Ebola) shows that the poorest, the most left behind are the least likely to re-enrol in schools. Girls are less likely to have access and have less sophisticated technologies. Girls are more likely to face gender specific barriers. This includes unpaid care responsibilities in the household and the dangers of sexual violence. So, what plans for enrolment do governments need to make?

3.3 Opportunities

Challenges mean opportunities. The common consensus amongst participants is that national governments should act in the context of creating opportunities that start with greater collaboration between all stakeholders in the education community. In schools the onus is not just on teachers but also working on leadership development and the preparing administration staff to help with school efficiency.

Some have highlighted how their students, for the most part, have responded well to online learning and have few problems in using technology. Of course, the issues of access and equity remain. Those who do not have the access simply do not have the opportunity to demonstrate their own technology capabilities. In countries with high internet penetration, Sweden for example, they found initially, that there was better student attendance online than in classrooms, but that online attendance has diminished with time. Such diminishing returns of virtual education need to be closely monitored and clearly more research needs to be made available to policy makers.

A major differentiator during COVID-19 has been the involvement of parents and families during school closures, representing an opportunity for the future of how the well-being of students and the benefit of online lessons requires greater collaborative effort with families as key stakeholders.

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.

This idea of taking a step back and truly thinking about the delivery of education as a whole was a common theme in all the break-out groups. The sentiment is that COVID-19 can be a catalyst for change, and we must not go back as we were before. Yet policy makers and teaching professionals for the time-being are still learning as they are going along, and such sentiment must be qualified with the caveat the many unknowns still lie ahead.

In Mexico they see a great opportunity develop the social function of schools through greater community and stakeholder collaboration. COVID-19 has truly exposed inequality in the access to education; technology can help but we need to go beyond that.

In Oman, from the beginning of next term, the ministry of education is working on a package of training on how to deal with online platforms and how to build e-content for learning. This raises an important concern about regulations. Currently, there are no regulations and protocols for remote learning.

The experience in Qatar has meant the ministry of education and higher education creating an evaluation and assessment policy on how to assist students. This has been sent to all schools and all parents have been informed. Their experience of using TV and YouTube, especially lessons for younger students, has highlighted the critical role of parental supervision.

Given the movement towards greater commitment to blended learning, the ICT infrastructure in many countries, its capacity, usage, and responsiveness have been truly tested. Especially problems of connectivity in poorer countries and rural areas are accentuated, along with the lack of access to devices and e-learning platforms. Investment in ICT for education will form a necessary part of future resilience but, of course, concerns were raised about the economic impact of COVID-19 and the budgetary constraints it will put on governments.

3.4 Teachers

The building of capacity and supporting teachers should also encourage greater peer-to-peer collaboration within the profession; the formation of working and focus groups to share experiences to augment regular profession development and that lessons learnt can be included in future CPD policies.

We are now talking about a new kind of teacher with minimum competencies in ICT for education. In Egypt they view this summer holiday period as an opportunity for teachers to learn such that they are capable and empowered in time for the new academic year in September. Teachers are now realising the importance of new technologies for the future of their profession and in Egypt they wish to have a certification for "online teachers".

In Spain they started a new program called "Educa en Digital" to transform education and to build competencies for teachers to enhance their digital literacy skills and ensuring that families and learners are better prepared.

Teachers very much lie at the heart of solving the challenges opened up by COVID-19 and central to supporting them is to equip teachers with more skills and develop robust standards for the certification of digital competencies. Policy makers need to establish new frameworks for online learning and accordingly invest more in teacher training to build capacity. Some participants spoke of there being a compulsory ICT component within all teaching pre-service qualification.

In the State of Maryland, they have emphasised that relationships are key. Here teachers have developed programs for meeting in small groups. This approach improves communication between peers and teachers interacting with each other have found themselves better able to identify the progression of learners. Likewise, in Australia they know that teachers fully understand the learning pathways and for online education it is critical that the technology allows for the monitoring of student advancement.

All participants spoke of their expectations of how online and blended learning is going to be a permanent feature of education service delivery and thus teacher training and continuous professional development is critical. We need to adapt training and pre-service qualification such that online learning and virtual lessons are included in the curriculum of teacher training colleges. Fundamentally, teachers are trained to teach in a physical setting and so new initiatives are required to ensure professional development in online pedagogy and assessment.

A major issue, common to all from the COVID-19 experience, is the training of teachers to be better prepared for remote learning. In Oman, from the beginning of next term, the ministry of education is working on a package of training on how to deal with online platforms and how

to build e-content for learning. This raises an important concern about regulations. Currently, there are no regulations and protocols for remote learning.

Teachers in Mexico had previously 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. This sentiment was also reflected in Hungary where they have seen how COVID-19 has shifted the mindset in teaching practices – moving away from the delivery of facts and shifting towards competencies, linking evaluation of teachers to this competency development of their students. There has been some push back from teachers because of a belief that competencies are hard to assess.

3.5 Learning Outcomes & Policy Reforms

An important, and oft forgotten, policy is the necessity to have social and emotional learning (SEL) built into instruction. How do we help children understand the new ways of behaving given social distancing and the necessary changes taking place in schools? These are real challenges for school leaders and teachers. If there is a greater uptake in virtual education, then lessons need to be specifically constructed for the virtual environment. It is no use just digitising existing information and posting it online. That is not a lesson. So, policy makers should be looking at bringing together a whole gamut of key actors including coders, designers, gamers, curriculum developers, trainers, and teachers in developing proper digital content under an appropriate pedagogical framework. We need to think about how young people today consume new media. With policy makers

moving to more blended learning programs it is clear that time and resources need to be invested in digital skills and especially the ICT infrastructure. With the true state of online connectivity exposed for what it is in many parts of the world, governments must surely now be looking at far more robust partnerships with the telecommunications operators. After all, a truly equitable and well-connected education system with greater use of devices can only be of benefit to the operators and hence their collaboration and contribution is essential.

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. Such learning outcomes in the future will need to address more qualitative proficiencies including communications, social and life skills and any such reforms must be connected to classroom methodologies.

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 (AI) leads to some inherent biases especially those of varying cultural backgrounds or dual-language learners; technology and online content is an environment with a wealth of distractions; and the internet is in itself a breeding-ground for cheating and chicanery. Furthermore, technology cannot provide answers to important and necessary extra-curricular activities such as physical education, school trips, technical and vocational activities, and the vitality of musicianship, amongst many examples.

When employing ICT skills, variety is of importance. In Qatar, for example, when using MS Teams and their interactive learning platform they noticed a drop in the writing and speaking skills of students. Measuring such changes is a challenge when live-streaming. This problem has also been noticed in Mexico where they recognised that if the most important skill of writing is diminished by the use of online learning then language learning becomes a huge challenge as it is difficult to understand the structure without being familiar with the composition of words and grammar.

The coming year will very much be one of transition where ministries of education should have a comprehensive evaluation of their education strategies, focussing on the type of content, the type of platforms, the type of regulation and the type of training for teachers. All countries would be well served in dedicating time to have a detailed evaluation because of COVID-19. Also, some students may be behind, so it is necessary to have programs to both assess the level of learners and implement a catch-up program for those who have lost time.

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. What are we going to do about content for grades 1 to 4 if the impact of COVID-19 continues? 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.

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. Teaching and pedagogy is very different with online learning and preparations need to be made accordingly. Even though there may be differences between countries, the post COVID-19 landscape could well lead to better international collaboration with shared technologies and the leveraging of regional purchasing power with the edtech industry.

Ministries of education and communications need to work together to ensure there is a wider spread of availability that is also affordable. This requires leadership and vision from the very top of government. One crucial issue is for the funding agencies to be responsive to digital technologies. There is a view that the donors look at ICT as a luxury and that there is not enough capacity. We need to narrow the gap between developing and developed countries by using ICT for leapfrogging. But digital learning is not a luxury.

Any policy reforms introduced by governments should be evidence-based decisions. When it comes to online learning there particularly needs to be an appreciation of the relationship between learning outcomes and the socioeconomic background of the children. The rush to digital transformation requires cool heads, thought-provoking evaluation, and informed discovery by ministries of education, being wary that much existing research shows that online learning does not support the most disadvantaged learners.

In Kenya, for example, there has been considerable investment in the digital literacy program and adding a competency-based curriculum. Yet COVID-19 has still shown the need for a broader framing of education and there are three areas that need further attention: parental engagement & empowerment; value-based education; and community service. Policy makers need to consider these.

ASSESSMENT

Assessment

The assessment conundrum is at the forefront of the minds of 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. So many other aspects of education, including critical thinking, problem solving, extra-curricular activities, and project-based learning are not properly addressed by summative assessment. 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.

Hence, participants in the meeting were asked: has the COVID-19 crisis shifted the emphasis of assessment in the future? Will we see a diminishing of the end of year high pressure exams to more ongoing formative and coursework assessment? Do you have any policy recommendations regarding using technology to have more assessment online? What role can industry and solution providers play in your country to better design content delivery technologies that also have the capacity for interactive assessment?

4.1 COVID-19 as a Catalyst

The common sentiment of all government's in response to COVID-19 is that no harm shall be done to students. This has meant deciding what to do with assessment being somewhat of a challenge for educators, and has led to some long, hard thinking amongst educators. Not least, what is the purposes of assessment – informing the system, informing the teacher, informing the student? Accordingly, does assessment need re-engineering?

In the US for example, some are seeing this as a silver-lining of COVID-19 and that the pandemic will be a catalyst for change in how we assess. End of year examinations are written a great distance from where students live. This is an opportunity for the assessment system to overhauled and reimagined to look at the goals in life of the child.

In Canada teachers were instructed that there would be no final exam at end of year. Assignments would continue, be marked, but grades would not go down – especially as those who did not have access to technology would not be disadvantaged.

In the Maldives, the policy since 2016 has been heavily reliant on summative assessment. The ministry of education is now communicating the importance of formative to accurately reflect student achievement because of COVID-19, but this remains a challenge. Likewise, in Spain, assessment was a big challenge in response to COVID-19, although universities are better prepared because they already employ learning platforms. This year assessments were cancelled, and grades have been based on where the students were when the pandemic hit.

COVID-19 has stimulated many policy makers and educators to ask how much learning is really happening in the classroom and how good are current assessment infrastructures and readying learners for real life skills. Does the system both accurately reflect student

achievement and make the best advantage of the talents of each individual learner?

This essentially becomes a question of equity in education and COVID-19 has sharpened the focus on ensuring greater integrity and fairness in assessment policies. By demanding an assessment strategy where every child has an equal chance, policy makers must appreciate the unique barriers faced by students and how to provide the support mechanisms to overcome those barriers. This does not necessarily result in equal outcomes, but it does mean striving for equal opportunity.

Participants in the meeting felt that more fairness needs to be consolidated into assessment systems that ensures both the circumstances of COVID-19 and the personal and social circumstances of the individual students do not prevent them from achieving their academic potential. This also highlights the need for greater inclusivity and the modification of standards to accommodate those learners with special needs.

As we shall see in future meetings of the Global Online Learning Alliance, the implications of COVID-19 on assessment policy making will all point to the need for greater resources – both human and monetary. Resources for teachers to have greater capacity and continuous professional development that includes training in student evaluation and the setting of questions; resources for equitable school funding; resources for new technologies and building digital competencies and resources for education authorities who need to shift assessment strategies and invest more in formative evaluation.

Ultimately, the correct assessment strategy is all part of building a more equitable educational environment and advancing both teacher and student empowerment. This includes students in special needs education, students with diverse educational needs and a teaching profession whereby assessment is also a core competency.

4.2 Developing Teacher Capacity for Evaluation

If there are to be changes in assessment methodologies with a greater shift to formative, then the question needs to be asked how you better prepare teachers. If we do not have the human resources in place to support teachers, then it will diminish the impact on the quality of instruction. For example, in Finland 25% of teachers have a PhD in assessment. To have such higher standards and qualifications for teachers then clearly greater investment in continuous training is required.

In Sweden they have not had final exams for decades. Teachers are entrusted with grading students continuously. They have looked at the options of assessing online but found that teachers are best able to assess students based on relationships and the ability to interact in a face-to-face setting.

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. The support for teachers is not just in terms of training but also dealing with the existing pressure they face from parents and senior leaderships in schools, to make sure they produce high levels of attainment in the form of grades or numerical marks. With this in mind it needs to be considered that teachers may neglect their formative practices in favour of summative assessment to meet intrinsic demands for the purposes of tracking data.

Any country that embarks on employing more formative techniques, as well as investing in new tools, needs to invest in training the teachers to embrace those tools. This sentiment was reflected in Morocco, where they are very much in need of building teacher capacity. The current focus is mainly on teaching and not evaluation. In Egypt they have been investing in online assessment as part of their overall learning management system. What is critical is the competencies of the teachers because they will need to formulate questions for project-based and ongoing assessment.

Any general shift to more formative assessment, will require teachers to know what the minimum standards will be; how many short exams/ test per semester; what will assignments look like and how much variance will there be depending on individual teachers; and will there be open book exams? All of these questions are ones of teacher competency and hence an integral part of CPD. Those teachers who must newly embrace project-based learning, for example, must recognise how this requires students to draw on a breadth of knowledge and techniques to plan and implement solutions to a problem. Accordingly, the teacher needs to be confident in identifying appropriate projects, suitable to the curriculum, and articulate the necessary instructions; as well as monitoring and guiding the student both technically and in the context of collaboration.

Such demands on teachers will need investment in capacities that allow for the understanding of new techniques and innovations; the ability to select such innovations from a seemingly limitless choice, communicate this to the students and then have the ability to assess the student in terms of all learning objectives. For this policy makers need to invest in:

  Adequate training, along with ongoing professional support – a process that in itself requires continuous external monitoring by the education authorities

  Investing in school leadership to both monitor and recognise accomplishments

  Develop conducive classroom conditions for project-based learning – made further challenging considering the health demands of the pandemic

4.3 Summative Assessment

For the most part, where the academic year starts in September, governments and education authorities have taken the outcomes of evaluation for the period September to March. What happens in the next academic year for those students in grade 12 who have expectations of going into higher education? Countries have been postponing and cancelling examinations, but universities need a grade. Although the idea of building continuous assessment into the education system was a common proposition amongst participants, many spoke of how they do not see final exams being removed altogether. The usefulness of grading and importance of a "number" is the strength behind summative assessment, but the durability and adaptability of final examinations needs to be made continuously relevant to real life skills.

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. Ultimately, examinations, such as end of year tests are tools for evaluation that

help align curricula and help students progress. Depending on the efficiency of intervention, the summative test offers useful information and data to all stakeholders.

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. Furthermore, the target of end of year exam has a tendency for teachers to distort their techniques in favour of students getting the best grades – which may not actually enhance a child's knowledge.

With such questions over reliability, validity and especially biasing against the likes of non-native speakers or those from a variety of cultural backgrounds or with learning difficulties, the impact of COVID-19 has certainly shone a light on the authenticity of summative evaluation.

4.4 Formative Assessment

Formative assessment was at the forefront of this education conversation and that it is an important part of the learning process. In summary, formative assessment is a process in which students and teachers work together to improve learning. Both students and teachers are active participants in the process as they generate, interpret, and use evidence of learning to aim for learning goals; apply criteria to the work they produce; and decide on next steps.

Many spoke of the perceived robustness of formative assessment, which as an ongoing practice asks where the student currently is, where they are going and where to next? Yes, it is critical to recognise that formative assessment is not the silver bullet, with still several obstacles that need tackling. For example, research has shown that in some cases when a student is given a mark there is no improvement between two lessons; and where students are given comments with their marks, the improvement is not substantial. Students will still tend to look at their mark and compare it to their classmates but pay little attention to the teacher comments. To make teacher comments, in formative

assessment, have any impact then it often requires one-to-one working with the learners. This brings about a huge burden on the capacity of teachers.

Participants in the meeting spoke of several benefits of formative and continuous assessment that can be summarised as follows:

- Monitoring of student progress and the working towards clear targets
- The ability for teachers to quickly identify where students may have gone off track
- Better collection of information that indicates the needs of the students and with it a more rigorous learning environment
- An increase in the classroom engagement of students, especially when activities reflect real world situations that sate the curiosity of the learner
- The learning experience becomes much more personalised
- An improvement in both academic achievement and practical everyday competencies
- Authentic evaluation of a learner in real time

The above points very much reflect ongoing research into summative versus formative, though some argue that a balance between to the two is the best way forward and that policy makers should be looking at how to build that balance.

4.5 Utilising New Technologies for Evaluating

Some of the meeting participants touched on the role of technology in improving assessment and this includes the need to ensure ICT interventions being incorporated into assessments.

There is certainly huge potential with technology but the lack of uniform standards and interoperability between applications is a big challenge. The use and interpretation of data is critical and accordingly that means further investment into training teachers in data literacy. How can they make data-based decision if they do not understand it? This leads

to the very important question around the nature of partnerships with industry vendors. Many governments and schools have chosen companies with different technologies and different types of assessment based on the company's data.

Qatar is a country that has invested heavily in technologies across the education system. They have leveraged the use of MS Teams for live asynchronous delivery of content and assessment. The ministry of education and higher education is moving fast to use new technologies that are capable of supporting formative and project-based activity. With state support of the distribution of tablets and laptops to all students, along with free internet and ensuring broadband in rural areas, assessment online becomes much easier.

Like all aspects of ICT for education policy, connectivity and equitable access is essential to devise and implement a strategy that incorporates online assessment. Here, better partnerships with the telecommunications operators remains a priority to ensure such activities are zero-rated.

The use of technologies to support online assessment for example did raise concerns about the dangers of cheating or biases with certain forms of AI. Such concerns should be easily dealt with, especially cheating. Many distance learning courses up to degree level are well established and constructed in a way tests and exercises simply cannot be answered by "Googling" the questions. Furthermore, online tools have built in similarity software that can identify phrases or sentences that match already published work. In fact, technology is well-placed to spot any attempts at plagiarism.

Currently the European Union is working a plan for formative digital assessment and is now preparing toolkits for teachers. This all comes under the action plan for digital learning that aims to make better use of digital technology for teaching and learning; develops relevant digital competencies and skills for digital transformation; and improves education through better data analysis and foresight. The European Commission co-funds the development and demonstration of a European-

wide learning and assessment technology system and network to facilitate the upskilling and reskilling of European citizens at risk of exclusion, whilst empowering citizens to take more responsibility for their own learning.

Overall, the sentiment regarding the use of digital technologies for assessment, included a very strong emphasis on far more robust partnerships with industry along with better guidelines and protocols. These should include more uniform industry standards, far better interoperability, and greater sharing of proprietary knowledge.

4.6 Shifting Assessment Strategies

Every participant spoke of the shift in strategy from summative to formative assessment. This would not rule out summative assessment entirely but may involve shorter examinations for evaluation and a stronger development of project-based assessments. What is crucial to know is that formative assessment is a process that involves working with students – it normally involves a dialogue (whether oral or written) which moves teaching and learning forward.

Amongst participants there was genuine desire of change in government policy on evaluation, whereby assessing students should be more about competencies and skills rather than a measure of their ability to retain content knowledge. That said, we should not exclude formative or summative, but the real question is how to build a balance between the two. This also means the use of ICT tools as part of blended assessment. A number of countries are deciding how to re-engineer their assessment, knowing that it will require additional competencies for teachers, school leaders and learners.

Generally, many countries have been moving towards competency-based education for the last 15 years and COVID-19 has accelerated this. Participants spoke of wanting to see performance-based assessment built into the curriculum but if it is to be project-based then it needs to be kept local as one size does not fit all.

Another recommendation of the meeting was that in encouraging assessment for a broad set of skills should also include social and emotional learning. SEL needs to be built into formative assessment. Also, it was suggested that maybe students should have the opportunity to activate the assessment themselves without having to wait for teachers to issue tests. Along with competency-based tools this encourages children to be proactive and take the initiative themselves, but such access would require cooperation with technology providers which means greater parental engagement and support for their children's education. Parental awareness should be a policy.

An interesting anecdote came from the Government of Ontario that has, just in the last few days, created a new curriculum for mathematics, whereby the first page of each section includes SEL in maths. These are the kind of social and emotional skills where students learn to identify and manage processes; recognise sources of stress and learn how to cope; and maintain positive motivation and perseverance.

So, has the impact of COVID-19 opened a new commitment from policy makers to invest more in continuous and formative assessment? It is probably too soon to say, but it is likely that many will pause for breath and the coming year in the world of education will very much be one of reflection. Reflecting on the balance between helping learners and assigning grades; the balance between improving a student's learning capacity and an analysis of their achievements; the balance between ongoing evaluation of parts of the curriculum and the assessment of the subject as a whole. How much will educators and policy makers consider assessment as a process or as a product of education?

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