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REPORT ON GOVERNMENT ONLINE VIDEO MEETING – 22nd JULY 2020 SAFEGUARDING LEARNERS ONLINE - DIGITAL WELL BEING & ACHIEVEMENT







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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 the Middle East & Africa, organised in partnership with Impero Software, was to discuss the safeguarding of learners online with an emphasis on student wellbeing and achievement. Generally, all participants were encouraged to discuss the actions of their governments and institutions, and to make policy recommendations appropriate for the education community given the continuing expansion of online and hybrid learning.

Executive Summary of Key Policy Recommendations

There is a sense that the online threats to student well-being have accelerated in recent times and there is now a greater sense of urgency to develop systematic frameworks with regulations that can be implemented swiftly. Already we have experienced students staying at home for such a prolonged period with still a great deal of uncertainty ahead of us. Uncertainty over the continued impact of COVID-19, of regionalised spikes or a second wave next year with millions of students at home. We must be practical because we are still in the midst of fighting a pandemic and time is short not just for schools but universities too in doing examinations or planning for the future. From the meeting a number of policy recommendations and issues were highlighted by participants. The following are not exhaustive but 10 important examples drawn from this meeting

Equitable access and connectivity is essential and far more robust and beneficial partnerships with telecommunications operators are required to avoid accentuating the digital divide

A greater need for accreditation and codes of practice for online learning are required to safeguard students

Online safety and digital literacy should be incorporated into curricula

Greater parental supervision during online learning at home requires greater parental awareness and understanding of the threats and vulnerabilities online



Young people may be digital natives, but they are not digital literate. They need mentors and welltrained teachers to educate them of the huge opportunities for learning online and at the same time need to be aware of their own responsibilities

Governments must establish data privacy frameworks and educators do more to teach children the importance of protecting their own personal data and information online

Learning content should be both age appropriate and experience appropriate

With a wealth of e-learning technologies and platforms, a sound policy would be to have a testing environment of software and applications prior to implementation. Like the telecoms operators, more robust and trusted partnerships with the e-learning industry are required

The well-being of learners is of the utmost concern and education policy should reflect this with greater emphasis on cyber-wellness and social & emotional learning

Teacher training and continuous professional development needs to have its own digital competency content for teachers to learn more about safeguarding learners online

Although online learning and assessment is wellestablished, there still exists a great deal of variance between countries and the urgency to implement online learning has been accelerated by the impact of COVID-19 causing prolonged school closures around the world. In previous meetings with multiple officials, the sentiment has very much been that there needs to be a strengthening of regulations, policies and guidelines for online learning to ensure young people are protected from harmful content, policy makers and educators are alert to vulnerabilities and student achievement is built into the system of safeguarding. This was an open discussion with moderated break-out groups and although the floor was open to any comment from officials, the following were given as guideline discussion points:

Online education and access to knowledge in the digital world presents a fantastic opportunity for learners everywhere and it has been seen as a key part of the solution in managing education in pandemic scenarios. However, what do we see as the vulnerabilities and threat to learners that we must be alert to?

Given these considerations, what are the key components of protecting students in the digital world in the context of educational delivery?

How do we educate children in digital literacy and ensure they build their own sense of online awareness, responsibility, and online behaviour?

Student safeguarding does not just mean providing online protection but includes a range of other factors, for example health, pastoral issues, what other considerations need to be considered for a comprehensive student safeguarding policy.

What metrics can we deploy to measure effectiveness of safeguarding policies? For example, educational outcomes, reduction in mental health issues etc.

Can you give your opinion on what are the vital elements of a national strategy for safeguarding students in the digital age?

How do you manage a comprehensive safeguarding policy alongside privacy & data protection laws?

How to decide access to content and allaying parental concerns, especially on the data being collected?

What kind of expertise do officials need to engage with before issuing policy guidelines?

1.2 Format of Video Conference & this Report

In section 1.3 we list the participants of this video conference on the safeguarding of learners online. 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: Hon Matthew Opoku Prempeh, Minister of Education, Ghana; Hon Mohamed Megahed, Deputy Minister of Education & Technical Education, Egypt; Dr Najwa Qbelat, Secretary General, Administrative & Financial Affairs, Ministry of Education, Jordan; plus a few opening comments from Hon Dr Basri Salmoudi, Deputy Minister for Education, Palestine. 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: Welcome from Justin Reilly, CEO, Impero Software

Part B: Opening statements from Hon Matthew Opoku Prempeh, Minister of Education, Ghana; Hon Mohamed Megahed, Deputy Minister of Education & Technical Education, Egypt; Dr Najwa Qbelat, Secretary General, Administrative & Financial Affairs, Ministry of Education, Jordan; Hon Dr Basri Salmoudi, Deputy Minister for Education, Palestine

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

Part D: All participants returned from their breakout groups. Summary and synthesis of key issues was given by Justin Reilly, CEO, Impero Software. The final closing policy recommendations were given by Dr Mohamed El-Guindy, Cyber Security Expert, Centre for Law & Emerging Technologies, British University Egypt & Consultant to UNESCO

The total time of the video conference was 115 minutes

After introducing the participants in 1.3, the format of this report is structured around the policy issues and non-attributable quotations. The participants hold senior positions in education from multiple Middle Eastern & African countries and expressed what they are experiencing as well as their own policy recommendations.

Notably, the issues raised covered key topics such student well-being in a digital age, data privacy, online exploitation, cyber-security, appropriate educational content, and the impact of isolation during COVID-19. Clearly, these topics overlap and with the aim of preserving a holistic view of education policy, this report avoids splitting up into individual issues. Hence, after a summary of the opening statements, the format of this report is structured around three main headings:

Overview of key issues

Mental well-being & data privacy

Digital literacy & pedagogy

Governance & policy making

Furthermore, this report includes a summary

and syntheses of the key issues along with policy recommendations by Justin Reilly and Dr Mohamed El-Guindy.

1.3 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 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:

ALGERIA: Salim Baba Ahmed, ICT Manager, Ministry of Education and Vocational Training
BAHRAIN: Dr Gurmullah Alghamdi, Rector, Arab Open University
DJIBOUTI: Mohamed Abdallah Mahyoub, Secretary General, Ministry of National Education & Professional Training
DJIBOUTI: Said Nour Hassan, General Manager of CRIPEN, Ministry of National Education & Professional Training
DJIBOUTI: Mouna Ismael Abdou, Head of Inspectors, Ministry of National Education & Professional Training
DJIBOUTI: Abas Ikbal, ICT Expert Consultant, Ministry of National Education & Professional Training
DJIBOUTI: Ayane Osman Abrar, Executive Secretary, Ministry of National Education & Professional Training
DJIBOUTI: Abdourahman Ahmed Abdo, ICT Manager, Ministry of National Education & Professional Training
ALGERIA: Salim Baba Ahmed, ICT Manager, Ministry of Education and Vocational Training
BAHRAIN: Dr Gurmullah Alghamdi, Rector, Arab Open University
DJIBOUTI: Mohamed Abdallah Mahyoub, Secretary General, Ministry of National Education & Professional Training
DJIBOUTI: Said Nour Hassan, General Manager of CRIPEN, Ministry of National Education & Professional Training
DJIBOUTI: Mouna Ismael Abdou, Head of Inspectors, Ministry of National Education & Professional Training
DJIBOUTI: Abas Ikbal, ICT Expert Consultant, Ministry of National Education & Professional Training
DJIBOUTI: Ayane Osman Abrar, Executive Secretary, Ministry of National Education & Professional Training
DJIBOUTI: Abdourahman Ahmed Abdo, ICT Manager, Ministry of National Education & Professional Training
EGYPT: Hon Dr Mohamed Megahed, Deputy Minister, Ministry of Education & Technical Education. Opening Speaker
EGYPT: Dr Amr Bosila, Advisor to Deputy Minister, Ministry of Education & Technical Education
EGYPT: Ahmed AdbelGhany, Egypt WISE Project, Ministry of Education & Technical Education
EGYPT: Dr Inas Sobhy, Director General eLearning, Ministry of Education & Technical Education
EGYPT : Dr Mohamed El-Guindy, Cyber Security Expert, Centre for Law & Emerging Technologies. Consultant to UNESCO, British University Egypt. <i>Expert Synthesiser</i>
EGYPT: Dr Marwa Zein, Law Faculty Council Lecturer, British University Egypt.
GHANA: Hon Matthew Opoku Prempeh, Minister of Education. Opening Speaker
GHANA: Akwasi Addae-Boahene, Chief Technical Advisor, Ministry of Education
GHANA: Laila Abubakari, Assistant to the Minister, Ministry of Education
IRAQ, KRG: Shelan Junaid, Director General Basic Learning and Kindergarten, Ministry of Education

IRAQ, KRG: wan lalal Mohammed Shareef, Director General of Scholarships and Cultural Relations, Ministry of Higher Education IRAQ, KRG: Dr Kawa Abdulkarim Sherwany, President of Erbil Polytechnic University, Ministry of Higher Education IRAQ, KRG: Dr Alan Faraydoon Ali, President of Sulaimani Polytechnic University, Ministry of Higher Education IRAQ, KRG: Dr Lazgin Abdi Jamil, President of Zakho University, Ministry of Higher Education JORDAN: Dr Najwa Qbelat, Secretary General Administrative and Financial Affairs, Ministry of Education, **Opening Speaker JORDAN**: Dr Yosef Aboushaar, Director of the Directorate of Planning and Educational Research, Ministry of Education JORDAN: Eng Ruba Ahmad Omari, Director of Queen Rania Centre, Ministry of Education JORDAN: Adel-Qader Al-Bataineh, Director of Policies and Strategies, Ministry of Digital Economy and Entrepreneurship JORDAN: Dr Nael Al-Adwan, Investment Manager, Ministry of Digital Economy and Entrepreneurship JORDAN: Reem Bsaiso, Founder & Managing Partner Global Outreach & Head of Middle East Government Relations, Brains Global KENYA: Dr Sara Ruto, Chairperson, Kenya Institute of Curriculum Development KENYA: Dr Katherine Getao, Chief Executive Officer, ICT Authority KENYA: Dr Lawrence Guantai, Chief Executive Officer, Technical and Vocational Training Authority KENYA: Dr Osawa Otta, Deputy Director, Research and Development, Technical and Vocational Training Authority KENYA: John Kimotho, Director Educational Media, Kenya Institute of Curriculum Development **KENYA:** Paul Ronoh, Director, Programmes and Standards, ICT Authority KUWAIT: Prof Omar Al-Jarrah, Vice President for Planning and Development, Arab Open University KUWAIT: Dr Duna Almashaan Alkhudhair, KFSA Scholar - Education Leadership K12, Kuwait Foundation for the Advancement of Sciences LEBANON: Dr Maya Samaha Rupert, Vice Chair, Institute for Internet and Technology Addiction (INTA), Notre Dame University LEBANON: Dr Fawzi Baroud, Assistant Vice President for Information Technology, UNESCO Chair on Open Educational Resources for Access and Success, Notre Dame University LEBANON: Prof Sobhy Abo Shahin, Dean of Student Affairs, Beirut Arab University LEBANON: Prof Ali El-Zaart, Professor of Computer Science, Faculty of Science, Director of the Centre for Continuing & Professional Education, Beirut Arab University LEBANON: Prof Seifedine Kadry, Professor of Data Science, Beirut Arab University LIBYA: Dr Masauda Elsawed, Director General Centre for Training & Education Development, Ministry of Education MOROCCO: Elarbi Imad, President, Moroccan Centre for Civic Education MOROCCO: Halima Benramadane, Community Manager for Information Monitoring at GENIE Program, Ministry of National Education, Vocational Training, Higher Education & Scientific Research OMAN: Azza Alharthi, Assistant Director General Education Evaluation, Ministry of Education OMAN: Fathiya Mohammed Al Maawali, Senior English Supervisor, Ministry of Education OMAN: Dr Zaid Zaabnoot, Director General of Planning and Development, Ministry of Higher Education OMAN: Dr Jokha Al Shukaili, Director General of Universities and Colleges, Ministry of Higher Education OMAN: Omar Al Abdul Salam, Head of Quality Assurance Department - Directorate General of Universities and Colleges, Ministry of Higher Education OMAN: Dr Rashid Al Hinaei, Dean of Ibri College of Applied Sciences, Ministry of Higher Education OMAN: Salma Al Musharafi, Dean of Sur College of Applied Sciences, Ministry of Higher Education PALESTINE: Dr Basri Salmoudi, Deputy Minister, Ministry of Education

PALESTINE: Dr Ahmad Ammar, Director General of Supervision, Ministry of Education

PALESTINE: Mohammad Midani, Director General of IT Department, Ministry of Telecommunications & Information Technology

PALESTINE: Rania Jaber, Director General of Technological Innovation and Creativity Centre, Ministry of Telecommunications & Information Technology

- PALESTINE: Dr Mohammad Mattar, Director of the Centre for Research and Development, Ministry of Telecommunications & Information Technology
- PALESTINE: Ohoud Jarrar, Economic Researcher Analyst, Ministry of Telecommunications & Information Technology

QATAR: Nouf Al-Kaabi, Director of Polices 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
- 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

- SOUTH AFRICA GAUTENG: Slindo Shamase, Chief of Programmes and Institutional Strategy Development, Department of Education
- SOUTH AFRICA GAUTENG: Handson Mlotshwa, Director: Teacher Development & ICT Programmes, Department of Education
- SOUTH AFRICA MPUMALANGA: Michelle Tebeila, Director of Management Information and Technology, 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

- TUNISIA: Swansan Hafeez, Chief Engineer, National Centre for Technologies in Education, Ministry of Education
- TUNISIA: Latifa Al-Sharif, General Engineer, National Centre for Technologies in Education, Ministry of Education
- UK: Justin Reilly, CEO, Impero Software. Joint-Host, Synthesiser & Moderator

UK: Nikki Annison, Chief Operating Officer, Impero Software. Moderator

UK: Fraser Crawford, Chief Financial Officer, Impero Software. Moderator

UK: Andy Free, Head of Partner Markets, Impero Software. Moderator

UK: Iyad Malaeb, Head of Middle East, Impero Software. *Moderator*

UK: Amy Barker, Head of Marketing, Impero Software. *Moderator*

UK: Adrian McDonald, Global Channel Manager, Impero Software. Moderator

UK: Christopher Morris, Managing Director, African Advisory Partners. Moderator

UK: Sandy Wade, Associate Director, Horn of Africa, African Advisory Partners. Moderator

UK: John Glassey, CEO, Brains Global. Joint-Host

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

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

UNITED ARAB EMIRATES: Dr Tendai Charles, Assistant Professor of Education, Director of Centre for Research in Digital Education, The British University in Dubai

YEMEN: Mohammad Ahmad Sharaf-Eddin, Director, e-Learning, Ministry of Education

YEMEN: Walid Ahmad Hashem Al-Hashimi, Head of Coordination and Monitoring Unit, Ministry of Education

YEMEN: Zainab Al-Saman, IT Specialist, Ministry of Education

DISCUSSIONS

SECTION 2.

Discussion

2.1 Opening Statements

In his opening statement, Hon Matthew Opoku Prempeh, Minister of Education, Ghana referred to how the country is feeling the economic impact of COVID-19 and the desire to protect the economic system and jobs in the country. The ripple effects of this pandemic have impacted people's lives in so many ways that we could not have envisaged. In Ghana, schools were closed around the 16th of March, affecting nearly 10 million students from pretertiary to tertiary, both private and public schools. The Ministry of Education clearly know the effects of long-term and even short-term sudden shutdowns or closures of schools, impacting negatively on learning. So, the ministry felt it necessary to start putting in mechanisms to get schools to reopen in one way or the other. Assessing different scenarios, the government rolled out radio educational programs, and TV programs that are still ongoing.

For a number of Ghanaian school children there has been the application of online teaching including lessons, assignments, games, and interactive face time with teachers to allow for evaluation. They have also collaborated with e-learning companies to serve a rich educational content for students on all level. The ministry improved the applications available on the Ghana library authority website, including both national curricula and international books suitable for the curriculum. They also engaged international operators who offer learning management systems so they could roll out Ghanaian learning management and have started the training of teachers in the ability to manage virtual classrooms.

In the long-term there is no doubt that a blended form of education is here to stay accounting for potential peaks in the coronavirus that may necessitate local school closures in parts of the country or even broader regions. Beyond these steps, the Ghanaian government is also working hard to provide other resources to complement what they have done to ensure that learners do not miss out on their education. They are rolling out the national digital program, which will support teachers and learners with enabling devices and platforms.

Of critical importance is the ongoing discussions with the telecom operators to lower the tariffs, such that affordability does not become an issue in affecting



equity in education. There are areas large parts of Ghana, where internet accessibility needs improving. So, they are encouraging the telecoms companies to serve the under-served rural and remote areas. As well as being cognisant of the dangers of any digital divide, they also realise that not everybody is digitally smart, and that there is a need to avoid the potential dangers on the internet. Accordingly, the government is collaborating with the Singaporebased DQ Institute, formed by the OECD as a crosssector cooperative network of organizations from around the world that aims to improve global digital intelligence.

These cyber-risks they have identified include cyberbullying, gaming addiction, privacy problems, sexual grooming, human trafficking, false news information and other sources of misleading information. These risks can lead to serious negative outcomes, such as poorer school performance, school dropouts and an impact on mental health. It is therefore important that we give this matter substantial attention and find innovative ways to reduce that risk. For the COVID-19, Ghana's Ministry of Education was engaged with the Digital Intelligence Institute of Singapore to develop a digital intelligence framework, which has subsequently led to the development of the Ghanaian national digital literacy curriculum for both teachers and learners, and also for in-service training and continuous professional development (CPD). The Ministry of Education felt the need to train across both pre-service teachers and in-service training such that the children get digitally smart with the knowledge from the teachers.

The government has signed an agreement to have baseline studies conducted in Ghana, to better understand the impact on their children. It is important that the students are aware of the dark side of the internet. Polices up to now have included interventions such as children not being allowed to take mobile phones to schools, but the government wishes to have an overall new technology policy with a wider scope such that children can take devices and phones to school and use them as part of improving their education.

The Ghanaian COVID-19 educational resilience program focuses on providing training to teachers to better use technology to deliver content to students. By making teachers understand the dangers of cyber-security and the dangers to learners, the government will be equipping them with the tools to identify children who may be pulled to the dark side and bring them back to the mainstream. This includes training them to be able to block out most of these sites. Overall, it must not be forgotten that this provides us with opportunities to be innovative and forward looking in how we respond to the dynamics of remote learning, or e-learning. Blended education has become the norm and so there is a need to implement a regulatory and legal framework to support the deployment of online learning technologies. The ultimate consideration always must be what is in the best interest of the child.

Hon Dr Mohamed Megahed, Egypt's Deputy Minister for Education & Technical Education concurred with such a meeting being timely and the need to have regulations and policies for online learning. In Egypt, they closed all schools on the 15th March - 60,000 schools of more than 22 million students (pre-tertiary level). This involved the suspension of second semester assessments for the transitional years where certification or graduation is not required. Where assessment has been required the country has been prepared with the adoption of its overall national strategy called Education 2.0, which has enabled the country's digital education infrastructure. So, for those students in grade 10 they held their second assessment at home. Further innovations have been around project-based learning such as taking home research materials and topics. A challenge in these areas has been the upskilling and training of teachers in designing research and project-based content for each subject.

A key element of the feedback from teachers and students has been the importance of having a high standard of English given that most of the internet content is in English. But the national exams is a different story. In Egypt they have the Thanaweya Amma examinations which are a series of standardized tests that lead to the General Secondary Education Certificate for secondary schools and serves as the entrance examination for Egyptian public universities. These were postponed twice but started again on 21st June and were completed on 21st July. From the 26th July they are starting the technical diploma examinations that will continue through to the 13th August. So now, the government has planned to start the new academic year on 17th October. This timing will also be complemented with the opening of universities – around three weeks later than usual.

So, for the next year 2021 academic year, Egypt will surely have more blended learning, because there is no other way. How many days are they going to be in school? How many days out of school is yet to be decided; but for now, they have most of their teachers, and most of the students using the online learning platform. Next year, the General Certificate examination will be conducted electronically in Egypt. It has the advantage of being a new format that is not constrained by just one unified exam type. That is the revolution now taking place in Egypt's education system. Of course, the infrastructure, the internet must be better. The Minister of Education recently confirmed that the country is committed to investing in technology and in coordination with investing in bricks and mortar school buildings, to ensure an appropriate mixture of blended learning.



Of course, there are risks as outlined by the Minister from Ghana. Hon Dr Mohamed Megahed also pointed out potential commercial risks such as copyright problems from illegal downloading. So, it may well be necessary to train students on entrepreneurship and the legal implications to make programs, content, and applications available. Another necessity pointed out by the Deputy Minister was the need for policy makers to have technology audits, say, every six months to ensure that all is ok in schools. This needs to be complemented with good teacher training and technical support staff. It is the responsibility of all decision makers in education to come up with good policies to ultimately protect the well-being of our children.

Opening statements were completed by Dr Najwa Qbelat, Secretary General for Administrative and Financial Affairs at the Jordanian Ministry of Education and Palestinian Deputy Minister of Education, Dr Basri Salmoudi. Dr Qbelat, in previous meetings had referred to three possible scenarios for returning to school: every child returns to school in person; or a rotating system with 50% of students in class at a time for 2-3 days and blending with home learning; or the effects of the COVID-19 crisis lingers to such an extent that all learning remains online. For the time being, things have improved considerably in Jordan and they have opted to choose the first strategy of every child returning to school on the 1st of September.

During the closures, there have been multiple channels to deliver content, including TV, radio and online with the latter being the best guarantor of sustainable teaching and learning. With the greater adoption of online learning it has inevitably increased the percentage of children using the internet and this has accordingly generated issues that relate to risk. Negative experiences can be psychological, behavioural, and social so there is a concern around dangers such as cyber-bullying. So, it is necessary to develop supportive procedures and policies that mitigate risk and contribute to protecting children and maintaining their online safety while learning. This includes a more active role for the families and increasing awareness of the risk amongst parents as well as teachers. In addition, a lot more work needs to be done to develop electronic content and the quality of information that children are exposed to.

Palestinian Deputy Minister, Dr Salmoudi pointed to the bigger picture of overall governance and the importance of ministries themselves being learning organisations. Given the impact of COVID-19 leading to a re-engineering of the education system and this requires participation from all stakeholders and particularly stronger governance and improved inter-ministerial cooperation. Hence, engaging with civil society, engaging with the private sector, and giving more voice to parents in the management of schools. Governments are hierarchical institutions so becoming a learning organisation involves strong leadership from ministers and directors of education all the way down. This must sit alongside the idea of the entire ecosystem and that the ministry of education cannot do it all alone. There needs to be strategies to engage with those outside the ministry and to ensure wider participation that goes beyond just by technological means. In Palestine, the schools will re-open in early September and this is very much their approach.

2.2 Overview

Education is evolving with technology and technology is player a greater role and doing a better job in education. We witness the benefits as we see students having better access to information alongside more innovations in teaching with technology to expand the classroom boundaries. Equally we see the bad things, the cyber-security threats, especially when home schooling, the misinformation through social media and a variety of concerns over mental health. How does a student figure out which news is false, fake or propaganda and which is fact? Further concerns include data privacy over shared education platforms, cyberbullying, and online exploitation that digital technology brings to the new learning environments.

We are now at the stage where we see education merging with the internet. COVID-19 forced upon us the urgent switch to online and out of classroom learning when our teachers, students, instructors, and policy makers were not fully prepared. The pandemic has quickened our discovery of the tremendous problems regaridng the safeguarding of learners.

COVID-19 has potentially provided us with a golden opportunity to think more of extracurricular activities that include leveraging technology to better connect schools with the community and students with teachers. Social and emotional learning along with extracurricular activities will certainly come to prominence in the event of a second wave of the pandemic. Education policy will need to incorporate online assessment in the event of further prolonged school closures. 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 at readying learners for real life skills.

Although countries have utilised three main types of media, TV, radio and online, the biggest concern centres around the online 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. Given the possibilities of online education and access to knowledge in the digital world it really does represent a fantastic opportunity for learners and be part of the solution for managing education, it remains imperative to be alert to the vulnerabilities and threats to learners.

With policy makers moving to more blended learning programs 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 and digital technology service providers. Every participant in the meeting voiced their concerns over the urgent need to improve the ICT infrastructure. Of prime concern amongst all participants is how the COVID-19 pandemic has amplified inequality. Equity is a fundamental pillar of education and so systems need to respond quickly to ensure the most vulnerable are not left behind.

During COVID-19, we have seen a further leap in terms of teacher competence and capability in using technology. What the data does not really show us yet is how well students are already using technology. The issue with technology is how are kids learning at home? How are they easily distracted when in crowded environments? How are kids like these coping with learning anywhere, anytime? We need to go even further than just at home. We need technology everywhere, all the time for everybody, as a public universal human, right. This is something we really need to think about now in terms of government working in partnership with other organizations.

Digital working and remote learning, in the current climate offers fantastic opportunities in enabling students to learn in different environments and situations. So, it is important we get it right and understand how to make online learning work. The dark web cannot be ignored. With the expansion of online learning are we creating the next generation of innovators or the next generation of cyber criminals with whom we will be unable to deal with because their skills have outstripped what we can conceptualise?

So, there is a clear message from the policy making point of view of the need to balance between risk

teachers switched to using tools such as *Microsoft Teams* and *Google Classroom* but with no safeguards in place. The urgent need to adopt technology to reduce any potential loss of learning has come at the cost of protecting the users. Already from multiple online meetings of the *Global Online Learning Alliance* we have heard plenty of anecdotes of things going wrong, privacy settings not being in place and now the word "zoombombing" has entered our lexicon. Clearly, there needs to be pause for thought.

2.3 Mental Well-Being & Data Privacy

All participants spoke of the concerns over the mental health of children. The impact of the pandemic itself and the effects of isolation and staying at for home for long periods on young people and then the dangers to well-being because of spending more time unsupervised online. Both concerns are due to the reduced social interaction, spending less time with friends and of course not interacting with teachers and mentors within the structure of a school day.

Mental health concerns regarding the screen time and usage have led the likes of UNESCO, in 2018, to frame gaming in the context of disorder depending on the amount time spent playing. Digital technology has an addictive personality. Associated mental health issues around isolation, depression and anxiety are symptoms that have justified such classification. The addictiveness of digital technology is not just the unique domain of students and young people – the devices themselves, the software, the application are all designed to grab you and hold you. These are smart devices working with the reward centre of the brain, forming new habits with

and opportunities presented by digital technologies. To make the most of the opportunities requires good communication with the learners and expanding their horizons with an awareness that digital literacy with the right skills and competencies is very different from just being a digital native, drawn first to social media and gaming.

Several countries had to act quickly with school closures and



new frequencies. The apps, the games, the scrolling through social media are all designed to offer emotional reward. We need to be acutely aware of this in the context of education and pedagogy.

Online bullying, trolling, blatant insults, and offensiveness, especially via social media platforms is a deep concern. For the good of student well-being, dealing with this needs to be taught along with how social networks can be leveraged by the teaching profession for the betterment of education – such as important messaging relaying timetables and content or forming collaborative groups. A necessary policy is to have social and emotional learning (SEL) built into instruction. 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.

Traditional parenting involves a huge ongoing investment in behavioural guidelines for children and now parents must be aware of the dangers of the very worst kind of exploitative material that may incite racial hatred, violence, or extremist behaviour. In education this will involve constant practice and behaviour monitoring on the platforms along with filtering and the use of certain controlling applications. It is especially important to be cognisant of children with special needs who may be more naturally trusting or take things literally when they engage online, leading to less cautious participation in inappropriate activities.

Importantly schools are more than places of learning, they are key pillars in our societal infrastructure. For many children around the world it is the source of their main meal of the day. Schools are a safe place. In parts of some countries, South Africa for example, there are many children who are coming from informal settlements. The school offers a safe place with running water, electricity, and food. Schools are a place of social interaction that offer pastoral care throughout the structure of the day as well as access to physical and extracurricular activities. The interaction between teacher and pupil is fundamental to pedagogical practices and that loss of relationship affects motivation. Students, without any preparation, are being asked to self-manage their learning time and planning. Any sudden loss of relationships, as children are also experiencing from missing their school friends, will have often subtle consequences on mental health.

Data privacy in education is an issue that must be dealt with by governments. Frameworks need to be in place to protect the data of students and teachers. The educational platforms and learning management systems are collecting enormous amounts of personal data. Who owns this data? Although many countries have strong protections in place regarding data privacy in education, we find developing countries much less likely to have a robust data privacy framework for learners. The issue of what type of platforms are being employed came up regularly amongst participants who are concerned that we simply do not know the levels of security built within these platforms and how vulnerable they might be to hacking.

One of the most polarising issues since the early days of the internet has been copyright and intellectual property. It has had far-reaching consequences in the music and movie industries. Now educational content will be faced with similar problems if the proper legal tools are not in place to deal with copyright and the use of online materials. Participants in the meeting went as far to suggest that this should even be part of the curricula; we should prepare our children, instructors and even parents to be aware of legal risks also. Intellectual property rights in education have been widened and accordingly there must be a balance between open access and copyright. Not forgetting that IP rights are relevant concerns for teachers and educators who work within an organisation on contracts that grant the institution or the school to take all copyrights for materials produced.

For some learning platforms, the technology providers have given assurances about confidentiality and protection of student data. But there are an enormous number of applications in which the teachers do not have any control over confidentiality and data privacy. On the national level many countries have still not legislated for online privacy, therefore multiple stakeholders need to collaborate to come up with safeguarding policies and data protection for the student. Some teachers and lecturers are already advising their students not to use an app until they have checked the agreement and privacy statement of how their data is used.

In South Africa (Western Cape), they are about to launch an at home learning emergency pack that addresses cyber well-being, helps students to selfdirect and make them understand the concept of their own online footprint as part of having rounded digital skills. They have an existing policy for safety in education as well as guidelines for usage of social media and mobile devices which was initiated a couple of years ago as part of Operation Phakisa to sensitize the learners about their online presence.

Dealing with complexities such as data privacies and digital footprints is something that requires

ongoing education and mentorship. Students need to be taught what sites are secure and how to recognise those that are not; how to manage their own personal confidential information and educators should be looking to enforce this culture of experience. A teacher cannot control the online activities of a child out of school but can provide the direction, case studies and examples of how harmful content can be damaging, of how their personal identities and privacy are fundamental rights they must protect for themselves. These are cultural challenges as much as technical ones. Such cultural challenges will have a great deal of variance depending on geography. In some Middle Eastern countries for example, maybe more conservative families will not accept their girls and daughters participating in online video-based activities.

Clearly, there is a growing awareness amongst governments and universities as expressed in the meeting, whereby many are now educating pupils in the classroom about their digital footprint and identity. For example, what a young person posts online today is recorded forever and may come back to haunt them decades later in their careers. There needs to be a special awareness when posting any pictures or political opinions or the naïve re-posting of someone else's more extreme opinions.

Another aspect of data privacy is the storage of so much personal information in the cloud. All the platforms and e-learning technologies are cloudbased and outside the jurisdiction of the recipient country. Data in the cloud can be hacked and any protections put in place need to have international agreement and enforcement. One of the meeting participants referred to the use of webcams that are recording children inside their homes. There is an element of invasion of privacy there. Students might be in their bedrooms. Entire classrooms might take place with students at home. There is software available which can capture everything seen live on the screen; what regulations are needed to deal with this?

There needs to be clear policies that define and regulate the virtual learning environment (VLE). It must be clear to students, teachers and parents what is and is not acceptable behaviour online. For even younger children, parents need to be fully aware of the threats and vulnerabilities online along with having a regime for supervision. In some countries, such as Morocco, they use filtering for internet provided in schools using white-lists and black-lists, but with learners being at home the main way to protect them is greater awareness and reporting mechanisms.

2.4 Digital Literacy & Pedagogy

Young people maybe digital natives who are deft of touch through social media, but this is very different from embedding digital literacy in schools and the education infrastructure. Digital literacy is about making the students appreciate the scope and expanse of technology, from design to discovery, the digitally transformed world of the 21st century is boundless, and this means, above all, having robust and well-informed teaching of digital competencies. Such competencies are complex and currently there is no curriculum incorporating the digital world into social and emotional learning. The aim should be such that the student can disseminate for themselves and spot the online fake from fact. We often refer to Millennials, Generation Z (and now even Generation Alpha) as being digitally savvy but often their ability to navigate in the digitally world is not fantastic - and certainly not competency-based.



In many countries there is a big digital divide between different communities and geographies, the problem is exacerbated with teachers who are not digitally educated. Experience and mentorship are important elements of support for young people to navigate the choppy digital waters. Without well-trained mentors and teachers then so often, the technology streamlines

towards just social use, ignoring the huge vista of other possibilities. This is about digital citizenship and institutionalising the concepts of competence.

Hence, many participants in the meeting shared the view that there is an illusion about digital literacy. Young people are biased towards social media and adults are having difficulty in judging the quality of information. For a long time, we have respected what is written down in textbooks, yet online there is a huge amount of misleading information and often blatant nonsense. Navigations skills can be quite sophisticated so just moving old curricula online is not enough – learners are navigating a new reality in a new space.

One of the important challenges is competency across the teaching profession and COVID-19 has been a catalyst for rethinking whole policy structures around professional development. CPD needs to focus on skills, competency, the design of learning when using technology and online tools and to engage students such that they craft their own learning experiences. The educator needs to be as well-equipped as the student with the knowledge of cyber well-being. Although there is no one-size fits all there will certainly need to be more on how teachers are engaging with parents.

The challenges are similar across all countries in safeguarding learners online and to deal with it, the priority is pre-service and in-service teacher training. Alongside this is the necessity to somehow find a way to train and educate parents. They may not be speaking in terms of pedagogy and educational content, but they are struggling with the amount of time their children spend online and with what the implications of blended learning are.

If there is a greater implementation of 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. 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.

Visual tools and video interactions such as Zoom, and Microsoft Teams have a certain nuance because they need the attention of the user all the time. What is the impact of these visual tools? How much supervision do learners need and how much selfstudy will they be able to accomplish? Learning how to learn online will become necessary parts of future curricula. The biggest challenge is not so much the adoption of technology but the roll-out and training of teachers, students and not forgetting the increasing role of parental supervision.

At university level, they have plenty of positive experiences of utilising a learning management system (LMS). Not everything can be taught online – especially practical work, laboratory work and technical and vocational education, yet life after COVID-19 will see very different structures of lectures and tutorials at universities including changes in the number of students attending campus. On a national level, teachers, academics, and support staff all need to be certified in the use of the specified LMS. Utilising e-learning platforms in vocational training is more complicated and needs more investment in infrastructures, devices, and remote learning tools.

It is worth highlighting the importance of active learning or what some in computer science may call deep learning. This involves encouraging students to discuss projects online, teach them how to negotiate and exchange ideas, encourage critical thinking and supplement this with quizzes and test to deliver a holistic active e-learning strategy. This brings us to the importance of the design e-learning content and assessment. The use of technologies to support online assessment for example did raise concerns about the dangers of cheating. 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 such that exercises cannot be answered by simply "Googling" the questions. Furthermore, online tools have built-in software that can identify phrases or sentences that match already published work. In fact, technology is well-placed to spot any attempts at plagiarism.

Careful attention needs to be paid to assessment online. 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 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. 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 zerorated.

Some countries are now looking at the whole process of classroom transformation that includes orientation of learners around life skills and cyber safety education. This involves changing the mindset of teachers in how they adopt technologies in the classroom and now how they continue that adoption into the online environment, due to the current context of COVID-19.

2.5 Governance & Policy Making

When designing policy frameworks it requires a technology audit – the availability and type of platforms, the appropriateness of content, the design of software, the cost, privacy and copyright – all provisions that need placing within a framework while ministries of education are working in parallel to start a new academic year, with the added pressure of urgently implementing blended learning. A critical element of such policy making is age appropriateness within the structure of education. Clearly, content is age appropriate but for some exposure should also be age appropriate, maybe lessening the exposure of early learners and prioritising access for older children at more critical levels of assessment in their education.

Any framework needs benchmarking, the defining of criteria that can measure student achievement and success. In utilising software, for example, understanding the program per se is not important but producing something of value by using the software as a tool is how we can assess achievement. This could be an excellent opportunity for international collaboration, for countries to share their experiences and best practices as well as legislative collaboration in terms of performance measurement and uniform standards.

Accreditation and standards came up as a very common theme throughout the meeting. Only once such measures are put in place can policies be devised that incorporate blended learning into teacher training. Plenty of schools have implemented more online learning, accelerated by COVID-19, but we still do not know what are the guidelines for quality standards and hence the quality of teaching. Good governance will need to include unified training programs that accredits teachers, provides a code of conduct and also provides guidance beyond the risks of just cyber-security but also accounts for the impact of hours spent dedicated to online learning, from screen time to posture to general health. Such guidance clearly requires evidence-based research. Policy makers are now needing to learn quickly. Ministries of education need to become learning organisations themselves.

At the national policy level, any frameworks should also include codes of practice for working with industry and private sector stakeholders. As well as key operators such as the telecommunications operators, the digital technologies, the platforms, devices, and software are all provided by private sector companies who own the intellectual property. For the good of the education ecosystem, much deeper collaboration with the private sector is required. The telecoms operators have an important role to play in embedding advanced security and monitoring systems into networks.

Partnerships with the ICT and edtech industries is often spoken about positively because of the potential. In the immediate aftermath of lock-down a variety of short-term partnerships were formed with operators offering zero-rated access for educational content, some contributing to the purchase of devices and access to e-learning technologies. Yet mostly this has been very ad hoc depending the companies and countries concerned and policy makers are especially wary of bait and switch offerings. Implementing free technology services with little consideration to the context has the potential to cause harm.

Policy makers also need to pay close attention to inclusivity. 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.

Inclusivity means equity and access for all. 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. If urgent attention is not paid to remote and rural connectivity to ensure equitable access to avoid students who could just disappear off the grid.

Parental engagement and awareness will place further demands on policy makers and education administrators at the government, municipal and school level. Some of the meeting participants talk about even using online learning for parents. If they are involved in more supervision then why not have regular video meetings with parents to keep them up to date on safety, risks, harassment, and the strategies they can implement to minimise risk. Parental awareness then expands to wider community awareness of the vulnerabilities of online learning. This requires addressing fundamental questions around how to connect reforms with online methodologies; how digital learning can be connected to the wider community; and how to redefine assessments when evaluating online.

Several officials in the meeting expressed the need for there to be much more research on the issues of online safeguarding, student well-being and the pedagogical implications of digital learning. Educators, policy makers and academics need this research. They need the data and it should be made freely accessible to all. Plenty of governments and inter-governmental organisations have been sending out surveys and questionnaires since the start of COVID-19, but what has happened to these surveys and where can the disseminated information be sourced? There is clearly a call for joined up thinking and better institutional and cross-border collaboration to ensure these very worthwhile surveys that are asking pertinent questions of people on the frontline of education do not go to waste.

In terms of education governance, as we are fighting this pandemic, there remains uncertainty about school re-openings and the nature of such reopenings. Amongst some Middle Eastern countries there is talk of different scenario planning with three possible options: 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. Indications are that the 50/50 option could be called upon first as the crisis lingers on. 50% face to face and 50% online means 100% commitment to blended learning and that means considerable investment access to WiFi in more remote areas.

Given the concerns relating to well-being, data privacy, cyber-bullying and other key dangers identified in this report, one interesting suggesting for policy makers was the idea of creating a testing environment for software, content, and platforms. Governments, schools, and universities could participate in "testing consortia" that test to see whether digital technologies attain a certain standard and fulfil the requirements of a regulatory framework for online education. Such testing could even bring in students as they start a new course or project giving them a sense of ownership as well as increasing the awareness of the dangers of poorly design platforms and inappropriate content.

Such policies would certainly result in greater engagement from industry and developers. They would be more attuned to demands of the virtual learning environment and the regulations that apply in the education sector. Some countries have awareness campaigns such as "safer internet day" that include the participation of companies in schools. Such awareness campaigns can extend to families and communities. This should all be part of a wider governmental approach to engage with parents and make them more aware of the issues. Parents should know more about online security and be able to better help their children with online studying.



Those countries that have implemented an ICT for education operational masterplan, such as Kenya, have accompanied this with a child online protection policy. Yet the impact of COVID-19 has changed the paradigm because these frameworks are developed for the school and with school closures the online learning has shifted to the home. Does this mean the parents now have a legal responsibility under the child online protection policy? Certainly, key components of such protection policies need to be used as a guide for parents. Furthermore, any such policy must take account of the varying age groups and ensure an environment of innovation is maintained. After all, ICTs are tools for innovation and excessive legal red tape can easily stifle creativity and innovation. As we work on the policy, we must be sure not to block the creativity of learners - in conjunction with the previously mentioned age appropriateness of online education.

Ultimately, it is recognised that we cannot police the internet completely and hence must work towards a values-driven approach. A starting point for this in education is to have online safety integrated into the curriculum as they do in South Africa from grade 8 to 12. This is all part of an overall strategy called "cyber wellness" that looks at safety, security, ethics and broadening these to a form of cyber actualisation which brings about a more positive and influential contribution to the online world.

Simple integration can happen at the subject level. For example, when talking about geography, the teacher can refer to the technology of GPS and location settings on mobile phones; when talking about biology, the teacher can refer to chemical imbalances such as hormonal levels, adrenaline or dopamine that are stimulated when using some technologies. This then extends to lessons of how we interact online and particularly the impact that can have on self-esteem and esteem for others.

Policy makers and educators should be looking at how they integrate cyber wellness into core subject areas and then create meaningful content for the learners. This in turn allows educators to have a better insight into how students are behaving online. A better understanding of behaviourisms is needed if policing the online environment because it asks the question of what type of citizen do we want to raise within our community. This ensures that when driving policies, we keep the human element rather than just operational policies with a holistic perspective such that learners are aware of their responsibilities online.

As mentioned in the introduction, this next year will very much be one of transition as ministries of education, civil society organisations and communities evaluate their education strategies in the context of digital and online technologies. Not forgetting that technology will keep on disrupting and changing at a pace often guicker than the turnaround of policy making. What about the future impact of artificial intelligence (AI)? Will AI offer more options to protect privacy, identity, and the well-being of a young person online? Will AI offer more intelligent monitoring and evaluation of students that provides the data for policy makers to make evidence-based decisions? Or will AI and other new applications throw up a whole new gamut of vulnerabilities and threats that we have not even considered yet. After all, TikTok was only released worldwide on August 2018, within two months it was the most downloaded app in the USA and just two years later, as we write this report, has over 800 million users.

The challenge for policy makers and educators is keeping pace with the fast-changing and everevolving digital landscape of the 21st century.

2.6 Closing Syntheses

The summary and synthesis of key issues was given by Justin Reilly, CEO, Impero Software, and final closing policy recommendations were given by Dr Mohamed El-Guindy, Cyber Security Expert, Centre for Law & Emerging Technologies, British University Egypt & Consultant to UNESCO.

Note: the summaries of Justin Reilly and Mohamed El-

Guindy are in conjunction with the Appendix A and B in parts 3.1. and 3.2 of this report.

Justin Reilly pointed out that while safeguarding is critical, and whilst there are many things that we need to be thinking about, not just from the positives of technology, but also from the bad sides, one of the key issues is how misinformation can impact upon mental health. This led to interesting points about age appropriateness for access to education, and experience appropriateness, in terms of what children are experiencing, regardless of age.

This leads onto an experience in the UK, 20 years ago where we witnessed the terrible death of a girl called Victoria Climbié. It was a case that shook the UK, not just because of the horrors that she experienced, but because of the sheer number of people that had been in contact with her and had raised concerns. Some 140 different people or organizations had collectively seen things, but because they were not sharing knowledge, because the training was not there, because the frameworks were not in place; not enough was done to protect her. Sadly, she passed away in February 2000. It led to proposals in the UK for a much deeper look at how safeguarding and well-being is delivered and how schools play a critical role in this.

One of the things that stands out from the COVID-19 experience is that we provide services where teachers can raise concerns around individual children, and we saw a 60% drop off in the number of concerns that were being raised. It is not as if as concerns are going away. In fact, in a lot of cases, those children are being removed from the relatively safe environment of the school and through lockdown being pushed into the very environment that they should be released from. If there was a positive to come out of that is the role of the teacher as somebody who is collecting data, as somebody who is contributing to the safety of children. It has now become quite clear that a critical part of the journey for an individual, and not just from a learning point of view, is that the teachers are the first line of defence when we are considering the safeguarding and well-being of children.

Sadly, 20 years after Victoria Climbié, we are still seeing issues coming through in the UK, even though a considerable amount of safeguarding and wellbeing frameworks have been put in place. There is in fact a clear set of guidelines that has been launched and revised over several years. It was first launched back in 2003. It has been revised on several occasions, specifically guiding schools to make sure they are actively monitoring how children are and what role they take. Despite that, we are still seeing, in the UK, 40% of our primary schools are still using paper-based systems, rather than the digital systems available. Very often they are citing budget. That is one of the reasons why they are not doing so, and that is something that needs to change. Impero Software provides some of those services for free to all schools, not for a short period of time about forever, because they think it is extremely important to move schools away from paper based recording – digital systems will provide trend analysis, will allow notifications and will allow schools and teachers to intervene in a much more profound and sensible way.

In the United States, though, we are seeing that there is a move away from that. We are seeing that there is a greater desire amongst the educators and the pedagogues to involve themselves in safeguarding and well-being and to use digital systems. But the lawyers and the litigious nature of society is still causing some concern. When we come to the Middle East & Africa, we see several countries almost leading the way. There is a new respect for how classroom monitoring technologies, the remote learning technologies need to be coupled with safeguards, and digital systems.



Focusing on isolation of teenagers now, the 15 plus age group are a priority for access to education through digital means, remote learning, and provision of digital resources, but they are also the group that are most vulnerable to isolation. We know from research that about 80% of those teenagers do not feel that there is an adult in their lives that they can lean on who understands the context of their digital and online experiences. In other words, they feel that there are no adults in their lives that understand what they are doing online. So, some of them are going online to find support from their peers, and a very large proportion of those children are getting support from peers whom they have never met. Just purely an online relationship. That is something that we really need to think about as we develop our frameworks for those older learners.

Even in higher education we have been led to believe that they are adults and they can take care of themselves, but research is showing us something completely different. Those students who are leaving school, going to universities, and are not being supported – to assume that these young adults are therefore fine because they are adults is something that we need to reconsider.

Lastly an important point is the necessity to have a multi-agency approach, if we really want to be seeing a 360-degree, holistic view of any learner to ascertain their vulnerability. We need to look at how many touch points there are; with such a large number of different people with different roles within education who feed into that view such as health and social services and the police play a vital role in feeding into that picture.

Dr Mohamed El-Guindy pointed to how the digital age brings new challenges to students. To define well-being in the digital age needs a framework really to understand how these things are working together. We have a lot of different threats, especially cyber security threats to children online. And we have come up with regulations to deal with these threats specifically for kids who are using technology in school, or even at home. So, we have the mental health issues, we have the misinformation issues, we have also the digital divide issue, the cyber bullying and digital privacy.

When it comes to the collecting of data we do not know, specifically, where this data is held and who owns and manages the data. One of the most important factors impacting on mental health is the screen time. That is why we need to manage the screen time for children, especially the younger generation because they are already using technology at home everywhere. For example, we see about 44% of teenagers look at their phones as soon as they wake. With school closures, being stuck at home they are using technology more and more for a longer time; and this is very dangerous. Equally we are pushing them to use technology in education.

Gaming disorder is now mentioned in the UNESCO health guidelines, because of dangers such as excessive use of gaming, isolation, depression, and anxiety things related to violent gaming. Some software tools are using classical conditioning to hook children to always using the software. This is dangerous, because they are playing with the reward system in the brain by designing such kinds of software and tools, even educational software.

Also, there are new kinds of psychological syndromes appearing such as the phantom vibration syndrome – a new psychological syndrome because the brain is expecting something from the device. When you are scrolling Facebook, for example, you are looking for something to rush the dopamine in the brain – something new, something that you may miss, something cool, something to fuel the reward centre of the brain. Are students now carrying slot machines in their own pockets? Yes, they are digital natives, but they are not digitally literate. They are digitally illiterate. They do not understand how these technologies are affecting them. That is why it is critical to have digital information literacy in the curriculum.

A key policy recommendation for government should be to provide fair and equal access to the internet and ensure inclusive use of digital technologies. Governments need to develop and extend the training programs to include diverse skill sets for digital transformation. We need to also ensure that digital literacy curricula are available in schools and information ethics should be included in such information literacy along with understanding digital security and privacy. We need special frameworks for the digital well-being of students, we need to support the research on the societal and economic consequences of the digital economy, because this will help parents & students deal with the digital risks. If parents do not understand how to deal with this risk, it will be dangerous for their children and schools should have clear online safety policies as well as providing resources for digital safety. Dr El-Guindy closed with the Neil Postman quote:

"People will come to adore the technologies that undo their capacities to think"

That is of course, Postman's commentary on Aldous Huxley's *Brave New World*, dealing with societal oppression.

End

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



APPENDICES

Victoria Adjo Climbié



2nd November 1991 – 25th February 2000



UK guidance to support safeguarding



Keeping Children Safe in Education

- Launched in 2015, revised in 2016, 2019 and 2020.
- Designed to support schools in being able to effectively safeguard children in line with Working Together to Safeguard Children (a guidance for mandating inter-agencies to communicate with each other)
- All school staff are required to understand and prove they've read Part 1 of the Keeping Children Safe in Education guidance.
- Requirements:
 - Appropriate filtering and monitoring solutions to protect students online
 - Updated safeguarding policy
 - All records must be recorded in writing
- The 2020 revision will come into force in September 2020. This includes an update of the definition of safeguarding to include mental health alongside physical health.

Online safety partners

Experts in their field





The role of information sharing



The complexities of 360 degree information sharing in a data protected environment



STUDENT WELL-BEING

In the Digital Age

DR. MOHAMED EL-GUINDY FBCS, CITP, CEng, CSci, AFHEA, FRSA

TECHNOLOGY AND STUDENT LEARNING





TECHNOLOGY AND STUDENT LEARNING



MENTAL HEALTH AND SCREEN TIME

Given Scheck their phone as soon as they wake up



MENTAL HEALTH AND DIGITAL ADDICTION



The International Classification of Diseases (ICD) is the basis for identification of health trands and statistics globally and the international standard for reporting diseases and health conditions. It is used by medical





ISOLATION DEPRESSION ANXIETY

STUDENTS ARE HOOKED TO THE DIGITAL DEVICES









After Conditioning



CLASSICAL CONDITIONING

2 STIMULI ARE PAIRED TOGETHER

IVAN PAVLOV 1903



ARE THEY HOOKED FOR GOOD?

'A must-read for everyone who cares about driving customer engagement'

ERIC RIES, author of The Lean Startup

HOOKED

How to Build Habit-Forming Products

NIR EYAL WITH RYAN HOOVER

• HOW TECHNOLOGY HIJACKS BRAINS

• BUILD PRODUCTS THAT CHANGE BEHAVIORS

• BUILD USER'S HABITS WITH FREQUENCY

NEW SYNDROMES...

of the people suffer from Phantom Vibration Syndrome



THE SCROLLING **DOPAMINE LOOP**





DOPAMINE REWARD SYSTEM TENDS TO **BE MORE INVOLVED** IN WANTING VERSUS LIKING.

TECHNOLOGY PLAYS WITH THE REWARD SYSTEM



STUDENTS CARRY SLOT MACHINE IN THEIR POCKETS



THINK OF WHAT NOTIFICATIONS THEY GOT

Dopamine reward system activated

• REFRESH EMAIL APP

Dopamine rush released

• SCROLL INSTAGRAM FEED

Dopamine released expecting something cool to appear

SCROLLING NEWS FEED

Fear of missing something important

EDUCATION FIRST, TECHNOLOGY SECOND!

TO BENEFIT FROM DIGITAL TECHNOLOGIES STUDENTS NEED THE RIGHT SET OF SKILLS

MOST OF THEM ARE DIGITAL NATIVES BUT DIGITALLY ILLITERATE



RECOMMENDATIONS

GOVERNMENTS SHOULD PROVIDE FAIR AND EQUAL ACCESS TO THE INTERNET AND ENSURE INCLUSIVE USE OF DIGITAL TECHNOLOGIES

GOVERNMENTS NEED TO DEVELOP AND EXTEND TRAINING PROGRAMS TO INCLUDE DIVERSE SET OF SKILLS FOR DIGITAL TRANSFORMATION

ENSURE THAT DIGITAL LITERACY CURRICULA ARE AVAILABLE IN SCHOOLS TO TACKLE CURRENT AND FUTURE CRISIS

ENSURE THAT DIGITAL SECURITY AND PRIVACY FRAMEWORKS ARE AVAILABLE AND ADDRESSING PROTECTION OF ONLINE STUDENTS' DATA

RECOMMENDATIONS

GOVERNMENTS SHOULD ASSESS THE IMPACT OF DIGITAL TRANSFORMATION ON STUDENT WELL-BEING (FRAMEWORK IS NEEDED)

SUPPORT THE RESEARCH ON THE SOCIETAL AND ECONOMIC EFFECT OF DIGITAL TECHNOLOGY

SUPPORT PARENTS TO HELP STUDENTS DEAL WITH DIGITAL RISKS

SCHOOLS SHOULD HAVE CLEAR ONLINE SAFETY POLICY AND PROVIDE RESOURCES FOR STUDENTS AND PARENTS ON DIGITAL SAFETY



"PEOPLE WILL COME TO ADORE THE TECHNOLOGIES THAT UNDO THEIR CAPACITIES TO THINK"





Research funded by the Economic and Social Research Council, National Centre for Social Research in partnership with Smith, Marshall Albakri et. al (2019) produced the report **"How does poor mental health in the early years of secondary school impact on GCSE attainment?"**. <u>Read the full methodology here.</u>



The latest mental health statistics



1 in 7 young people age 11-16 has a mental health disorder.



Emotional disorders were the most prevalent types of disorder experienced by 5 to 19 years olds in 2017.



Half of all mental health problems appear before the age of 14, with one in four enduring mental health conditions present by the age of 24.



87% of young people agreed that they felt lonely or isolated during the lockdown period.

How does mental health affect achievement?

In both studies, mental health was measured using the Strengths and Difficulties Questionnaire (SDQ) at Key Stage 3 (age 11 to 14) with higher scores indicating poorer mental health.



One-point increase in young people's SDQ score at KS3 was equivalent to dropping one grade at GCSE.



Young people with poor mental health scores were 2.7 times more likely not to achieve five A* - C grade passes in their, even accounting for other background factors.



Young people's happiness with and attitudes to school and homework were the factors that most strongly explained the association between earlier poor mental health and later attainment.

Understanding the warning signs

How do we determine which students are in need of help versus those who are simply having a bad day? There are a number of behaviours in students that could indicate stress, especially if these behaviours repeat or become long-term problems. According to MHA and the World Health Organization (WHO), nearly half of all mental health disorders begin by the age of 14, so it's important to pay attention if students are:



Feeling angry or easily frustrated



Experiencing tiredness, likely caused by poor sleep



Losing their temper with peers



Having frequent headaches or other unexplained ailments



Experiencing changes in appetite



Having trouble concentrating or thinking clearly



Feeling sad/moody/nervous/anxious



Feeling they can't handle life's challenges



Shunning friends and activities

There can be differences in the ways that younger children and teens show loneliness. Younger children are more likely to create imaginary friends, become clingy, seek attention through bad behaviour they understand is wrong, be timid or unsure of themselves, or cry more often. For teens, the signs may include seeming sad, appearing not to have friends, no longer hanging out with former friends, or talking negatively about themselves.

Stress can affect students emotionally and physically. Excessive stress can make students feel nervous, anxious or overwhelmed. Stress can cause students to procrastinate or neglect responsibilities as they try to avoid stressful situations. Stress can change eating habits and sleep patterns, and can wreak havoc on students' concentration.

The effects of chronic loneliness can be severe, as bad for overall health as smoking 15 cigarettes a day or being obese, notes MHA. Chronic loneliness can increase children's cortisol levels, which also amps up the stress they feel. It can also lead to:

Higher possibility of alcohol or drug use



Less restful sleep



Poor self-care



Depression



Anxiety



Pessimism



Poor self-esteem



Higher risk of suicide

Early Intervention and support

When stress and loneliness become pervasive and affect students over a period of time, they need help. If these conditions impair students' everyday functions, they could be the first signs of a mental health condition such as depression or anxiety. Young people tend to be incredibly active on social media so these signs will often manifest themselves first online. Research from the University of Vermont noted computers can diagnose depression based on clues in someone's Instagram photos more reliably than a doctor can in a face-to-face appointment. For example, photos posted by those suffering from depression were on average bluer, darker and grayer than those posted by healthy individuals. Other clues came in the form of the type of filters the individuals selected and how many people's faces appeared in their posts, according to the study.

Other online indicators of mental health issues include changes in typing speed, voice tone and word choices. Today there are online monitoring tools available to help educators and administrators determine when students may be having an issue. Impero's student online safety features comprise a number of keyword detection libraries, this includes a mental health keyword library developed in partnership with MHA. When a student who is using the school network types a word found in the keyword library, whether it is in an application, on social media, or the internet, the system will send an alert to the designated school administrator.

Here are some examples of key words or phrases that could indicate a student is having thoughts of suicide:



"ehtilb" – a term or hashtag people use mainly when discussing or searching depression, cutting, or eating disorders.



"Feel so alone" – a phrase that may indicate a cause for concern as people suffering with mental health problems may state that they feel lonely.



"Pain-free way to die"– a phrase that could indicate a cause for concern as people having suicidal thoughts may discuss and/ or search on pain free ways to attempt suicide.



"Want the pain to stop" – a phrase that could indicate a cause for concern as people suffering with mental health problems may disclose that they want the pain to stop.



"kms" – text speak for "kill myself." This may indicate a cause for concern as people having suicidal thoughts may talk about or search on how to kill themselves.

An early warning system also provides schools with the data to make informed decisions around student mental health and wellness. **Impero Back:drop's** browser-based software can help schools and teachers do a better job of monitoring the mental health of students by showing a holistic view of every student's wellbeing. The software is a repository of student records of incidents and concerns allowing school officials to store and access student related documents, and their own documents and policies, related to each student. **Impero Back:drop** is an early warning system that can help inform effective interventions for students. This digital record keeping can both save staff time and simplify referrals, when needed, to relevant external services.

In a case study with the Pottsboro Independent School District in Texas, the district described the benefits of Impero's safety features in this way: "Impero Education Pro has helped open our eyes to a lot of things students spend their time searching for. It's given visibility of online dangers we couldn't easily identify before, such as bullying, self-harm and suicide patterns. We do a lot of the monitoring in our technical department and we've set certain keywords as severe (which trigger a notification), and we look at these on a daily basis. If we come across something like self-harm or suicide, it's not what we want to see, but it makes all our work and time implementing the software well worth it. When an issue is detected, we pass this capture to the counselor to see if it's legitimate e.g. a student searching a suicide hotline. The counselor can get an understanding of why the student has searched that, where they can notify a parent and talk to the student before a situation escalates."

In another example, a school reported Impero's keyword detection features helped it detect two students at risk of suicide within a matter of weeks of each other. One student was a 'happy-go-lucky' grade-A student who was showing no outward signs of needing help. However, keyword detection through Impero's mental health keyword library indicated the young person was planning to commit suicide. Fortunately, school staff were alerted, and the appropriate support was given to that student.

The second student was showing noticeable signs of struggle, however when approached the student would shut down and not open up to anyone in the school. Through keyword detection, Impero's mental health keyword library identified that the young person was researching suicide methods. This evidence empowered school staff members to approach the young person and provide the help the student so desperately needed.

Resources

Mental Health of Children and Young People in England, NHS Digital, 2017

Annual Report and Accounts, Young Minds, 2019

Coronavirus: Impact on Young People with Mental Health Needs, Young Minds, 2019

NR Smith, L Marshall, M Albakri, R Sehmi, The impact of mental health and wellbeing on GCSE performance in england: A longitudinal analysis of the national pupil database linked to understanding society, 2019

