

# REPORT FROM THE ICDE QUALITY NETWORK:

GLOBAL QUALITY PERSPECTIVES ON OPEN, ONLINE AND FLEXIBLE LEARNING 2020

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Published by: International Council for Open and Distance Education (ICDE)

Pløens gate 2B, 0181 Oslo, Norway ISBN number: 978-82-93172-47-5

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February 2021

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## **PREFACE**

The ICDE Quality Network was first established in November 2016 by the appointment of regional Focal Points on Quality by the ICDE Executive Committee (now named the ICDE Board). The quality network gives advice and collects knowledge on the latest developments of quality work related to open, flexible and distance education within their institutions and regions. Prof. Emeritus Alan Tait from the Open University UK is appointed as Chair for the Quality Network and coordinates the regional Focal Points.

During 2020, the ICDE Quality Network has been very productive. Four open webinar events in a webinar series entitled "International reflections on lessons learned during the COVID-19 pandemic" have been conducted, with various regional perspectives and reflections on quality assurance and assessment of online and distance education during the COVID-19 pandemic. Altogether, these four webinars were seen and participated by over 1000 individual subscribers worldwide. The network is also responsible for producing this report, that captures regional experiences felt during the pandemic.

The report gives an overview of perceived issues of quality and assessment related to the immediate shift to online and distance learning modalities that educators had to undertake when the pandemic hit. On behalf of ICDE, I would like to thank all the Quality Focal Points for contributing to this report through their expertise, regional networks and practical experience, we could never have done this without you! A special acknowledgement is in order to our Chair, Professor Emeritus Alan Tait, who has led and coordinated the editorial process, and provided a summary and context of the findings in his foreword. Thanks also to Special Adviser Julie Schiering from the ICDE Secretariat for practical facilitation and coordination of all the activities that the Quality Network has undertaken during 2020.

We hope the report will be insightful and informative to educational stakeholders from all parts of the world. We look forward to developing new activities and outputs related to quality enhancement of open, flexible and distance learning through the ICDE Quality Network and extended learning communities.

Oslo, February 2021

Torunn Gjelsvik Secretary General ICDE

## **FOREWORD**

The ICDE Quality Network is now in its fifth year of operation, with an overall mandate to advise on the development and understanding of quality issues in our field around the world, based on work done in Focal Points in the Arab Region, Africa, Asia, Europe, Latin America, North America and Oceania, and co-ordinated from the Headquarters of ICDE in Oslo, Norway. It had always been our intention to produce a summary of major trends and developments, in particular in support of ICDE's partnership with UNESCO and its aim for a World Conference on Higher Education in 2021. We did not expect however at the start of 2020, any more than anyone else, that the year would be so dominated by the COVID19 pandemic, and that it would have such a major impact on education at all levels and in all continents. As many as 1.3 billion school, college and university students were excluded from campuses in 195 countries in April, according to UNESCO (UNESCO 2020). The emergency development of remote and home based learning was imposed on many institutions and teachers with almost no notice. Schools, colleges and universities who had always considered themselves simply as on-campus providers of learning found their trajectory into technology-supported home based learning accelerated at a pace that both students and their teachers found bewildering, and for teachers in many cases with a complete lack of professional development. The COVID 19 pandemic also threw into very close focus the serious inequities in terms of access to technology, including hardware, infrastructure and cost of download that were suddenly made all too visible. Many school, college and university students, in some countries almost all, were excluded from education altogether. Even in rich countries the social inequities were exposed in ways that were unexpected and shocking. The end of course assessment which in many cases was managed through traditional unseen examinations in examination halls or centres presented a severe challenge, with examinations being moved online or managed through teacher assessment, or too often abandoned with all the implications for student progression that this has meant.

This then was the context for the work of the ICDE Quality Network in 2020, and accordingly we asked our Regional Focal Points to collect evidence on the following issues:

- The impact on your region of the growth of open, online, blended and flexible learning, with particular reference to scale of growth; perceived issues of quality; assessment and examinations; the reputation of open, online, blended and flexible learning, access an inclusion and acceleration of the digital transition;
- The experience of the speed of transition to emergency online teaching due to the need for such a rapid response;
- Your assessment of perspectives for Quality for open, online and flexible learning in your Region for the future.

The Focal Points undertook sustained assessment of the situation in their Region as best they were able, and the results are set out in this Report.

It is clear first of all that from March or April 2020 an overwhelming number of campuses in all sectors of education were closed all around the world, an extraordinary situation which threatened to impact negatively on individual, social and economic development for the future. In some parts of the world, for example North America, the COVID19 pandemic acted as an accelerator to an existing trend that is to say the increasing move to online and blended models of delivery, both in terms of online only programmes and campus-based programmes that were reconceived in terms of learning and teaching as blended offers. In other parts of the world, the closure of campuses and the move to remote teaching was even more of a shock to school, college and higher education systems for whom online education was a separate and minor sector of little concern to the majority of institutions. A number of reports indicate their understanding that this has changed for ever, which presents very significant challenges and opportunities for Quality and professional development, not least for ICDE as the global professional association in this field.

#### **Issues of Quality**

Significant issues in the broad field of Quality have been raised. Firstly, what was done in the first phase of lockdown, and understandably so for campus-based institutions in middle and higher income countries, was an emergency response that has been termed 'remote' rather than 'online' teaching. In other words the campus experience of lectures and small group seminars was delivered remotely using online video conferencing platforms. Students were advantaged in schools, colleges and universities that already had Learning Management Systems providing structures, processes and resources for learning. In other cases students have complained that what was given to them was inadequate, and in countries where significant levels of tuition fee are charged, inequitable. The report from the Arab region makes the point that in many countries in that part of the world there is little understanding of how Quality is managed in online teaching, which makes them and their students vulnerable to uninformed negative perceptions of Quality in online and flexible learning. This presents at least three urgent lines for activity for educational institutions and professional associations in this field, namely

- identify, understand and deploy the most relevant of the Quality assurance systems for online and flexible learning that exist around the world (see for example the report from the European region);
- build digital skills for students, as an investment not only for their programmes of study but also for personal and vocational life;
- develop programmes of professional development both within the institution, on an inter-institutional basis and on an international basis.

#### **Assessment and Examinations**

The challenge for assessment during the COVID19 pandemic has been highly significant from a number of perspectives, and was the most significant challenge for open and distance teaching universities which otherwise were able to capitalise on their expertise in the support of home-based study. The great majority of educational institutions, including open and distance teaching universities, deploy high levels of face to face end of course examinations. The rationale for this includes the need to check the identity for a significant element of credit bearing assessment in an online or distance system, as well as deriving from pedagogical conservatism which has meant that traditional methods have simply been rolled forward. Programmes which include end of course assessment modes such as projects found themselves and their students in a much better position.

However for many students in countries without IT infrastructure examinations were simply cancelled, with the concomitant loss of progress for the individual and the barriers to the achievement of institutional mission that this represents. This creates a backlog of work for schools, colleges and universities to catch up on in the future, and may present challenges for students to maintain their knowledge and understanding without further teaching at a level which allows them to maintain their progression towards qualification. In some countries in Asia for example Governments have made significant effort to bring more students on line with financial support for laptops etc. In Europe it is reported that alongside the cancellation of examinations in a number of countries, two major strands of innovation can be identified, firstly the move to online examinations, and secondly, the conversion from end of course examinations to teacher graded continuous assessment.

Latin America and the Caribbean Region make by no means the only report that emphasises the need to find new support for academic integrity in assessment, and to find means to combat plagiarism and fraud for assessment in online environments. The report from North America makes the highly significant point that revisiting pedagogical design for assessment will produce as many solutions as technological applications such as online proctoring or plagiarism software, and includes a checklist of priorities for rethinking assessment. Revisiting assessment purposes for learning as well as the judgement of performance, the role of formative as well as summative assessment, and the embedding of learning outcomes as the criteria which assessment needs to be built around, all present a major agenda for reform and development around the world, both on campus as well as in online and distance programmes.

There remains no doubt that the COVID19 pandemic has challenged assessment when it is moved to remote or home based methods, and this represents a programme of work both pedagogical and technological for the next period, for both online and campus-based programmes.

#### Reputation of Open, online, blended and flexible learning

The trend in all regions of the world for more programmes delivered online and in blended technology supported formats, while at very different levels in low, middle income and richer countries, has everywhere been radically accelerated by the COVID19 pandemic. However it is reported in more than one World Region – see the reports from North America and Europe for example - that the unpreparedness of institutions and their teaching and professional staff who took on the responsibility for the move to online teaching at the start of the campus closures in April 2020 has led in too many cases to poor quality emergency remote teaching rather than well-constructed online learning. Students in a number of countries have made their dissatisfaction known, loudly in many cases, and the reputation of online and blended learning, far from being recognised as crucial to individual, social and economic life threatens to be diminished. There is therefore an urgent need both for the development of quality assured online learning systems in all schools, colleges and universities for the future, as well as advocacy which identifies the many examples where the move to online learning has been well managed, and to promote student and teacher stories that support this.

#### Access and inclusion and the digital transition

The move to remote emergency teaching when campuses all around the world were closed in March 2020 did little to damage dedicated distance and online systems, although the restriction of staff to home working created practical as well as psychological and emotional challenges as in all sectors of employment. However, for campus-based systems in school, college and university sectors the absence of equitable and affordable hardware and download excluded many children and young people from education all together. It should also be noted that home-based study in situations where children and young people have inadequate space at home for study makes online learning all the more challenging. This is reported as being particularly acute in the African region, where it is also noted that the sharpest impact fell on the girl child, but was acute also in developed countries with high levels of inequality, as reported in Europe. Some governments as already noted made efforts to supply laptops to families, and it is worth noting the considerable initiatives in training teachers in online methods, for example in parts of the Arab Region.

There is agreement in all World Regions that whatever the difficulties that followed the closure of campuses at no notice by the COVID19 pandemic, the digital transition in campus based systems at all levels has been accelerated. There is no support for the view that the world of education will return to where it was in 2019, but that the deployment of technology-supported learning will move all campuses further towards blended systems where the face to face element of learning and teaching will be utilised more thoughtfully as one of a range of learning approaches, along with independent study and online interaction in synchronous and asynchronous modes. Not least will be the need for the redesign of campuses for the new understandings of what their modes of operation will be.

#### **Conclusion**

The reports from World Regions on the impact on quality of open, online, flexible and distance education in 2020 have given the global community of educators and policy makers a snapshot of educational systems in rapid transition. The COVID19 pandemic has closed campuses everywhere, and made the deployment of remote and off-campus technology supported systems an imperative in those parts of the world where they were possible. The outcomes for quality of learning and teaching have been mixed, not surprisingly given the absence of adequate notice, adequate hardware and download technology, or professional development. This creates a challenge to do two things.

Firstly there is the need to advocate from within the open and online community of educators represented by ICDE for the importance of off-campus technology supported home-based study as a mainstream mode for all education and at all levels We have to narrow the gap as a matter of urgency between the remote systems adopted as an emergency repose to the principles of learning design that represent the best of online learning and teaching. This represents a major priority to extend the professional networks and opportunities for professional development that ICDE has built in the professional communities in open, online, distance and flexible learning out into the mainstream school, college and university systems that now understand so much more about how the need for learning can be supported by blended and technology-supported approaches.

However, we also need to recognise that in many countries there has been very significant learning loss, and in some countries it will be near total learning loss for up to two years for the majority of learners. This creates challenges of equity at very significant scale, with children and young people outside the elites having their life opportunities further diminished. It will also present significant challenges for labour force needs, as the loss in the number of qualifications gained for the years 2020-2021 will impact very negatively in so many crucial employment sectors, such as health education, engineering, IT, etc. Policy makers and educational leaders will need to seek to develop remedial programmes that attempt to compensate for at least some of the learning loss for the sake of individual, social and economic futures.

In fulfilment of the renewed ICDE mandate given it, this range of issues will form the core of the work for the next period of the 7 Focal Points around the world that make up the ICDE Quality Network.

Alan Tait Chair, ICDE Quality Network

# **African Region**

Professor Nebath Tanglang
National Open University of Nigeria, Nigeria

# Impact of COVID-19 pandemic in the growth of open, online, blended and flexible learning in the African region

#### Scale of growth

The scale of growth of online learning is unprecedented. Institutions have no alternative to the unforeseen circumstance than to key into the New Normal of learning. Capacity Building becomes the challenge facing institutions of learning in Africa. Most teachers and lecturers lack the capacity to handle online learning tools. The worst are those at the basic level of education. Observations have revealed that a large percentage of higher education institutions in Africa have embraced distance education. Some are already following the correct and acceptable methodology in their operations while others are yet to fully understand how it should be done. The scale of growth of open, online, blended and flexible learning is slow especially at the basic level of education. The growth is being witnessed in institutions of higher learning where most institutions are now engaged in acquiring digital infrastructures and capacity building for online learning.

#### Perceived issues of Quality

It is the older well known institutions and established institutions that seems to be adopting the principles of the Quality Assurance in line with the African Council for Distance Education Quality Assurance and Accreditation Agency Toolkit and Framework. Others are also seen using other Frameworks.

#### Assessment and examinations

Assessment and examinations are still basically based on the face to face, pen on paper mode in most of the institutions because of the challenges of low bandwidth and internet connectivity. However, some institutions have started doing well on the computer based and online assessment with an encouraging credibility. Assessment online became a serious issue. Up till now most Universities have not conducted assessment for their students due to the pandemic. Universities in Nigeria remain closed down except for the National Open University of Nigeria which has continued learning and have conducted proctored online examinations and some few private and state owned universities. For instance Ogun State University in Abeokuta Nigeria has been doing well in terms of teaching online. They have conducted convocation remotely.

#### Reputation of open, online, blended and flexible learning

The Open University of United Kingdom,/ACDE /IET.TESSA sponsored pathways training of about 1760 African Teachers on how to move teaching online and how to make teaching relevant in the 21st century is indeed helping to assure the reputation and credibility of open, online, blended and flexible learning. The training was able to utilize the period of lockdown to train the teachers from across Africa for the enhancement of their professional development. Already, about 500 of the entrants have completed the training with award of certificates and badges

#### Access and inclusion

The issue of access and inclusivity remain a big challenge because of lack of relevant infrastructure and resources which are not well distributed in each country. Hard hit are those living in the rural areas as well as indigent candidates. The girl child still remains the most marginalised in terms of having access to education at all levels.

#### Acceleration of digital transition

The economic base of each country seems to be the determining factor in the acceleration and digital transformation of the higher education institutions in Africa. There was great enthusiasm for most students at the secondary school level with their new experience of the TV and online learning. Some commented that they understand more learning through television programmes than what their regular teachers were teaching them in their face to face learning.

The acquisition of mobile phones by students has increased with the use of social media as a means of online learning. Teachers are sending assignments to their students through WhatsApp and telegram. The use of Zoom became popular for most meetings, teaching and learning in institutions of learning. There is an accelerated effort by most institutions in capacity building on the use of online learning tools. With all these developments, internet penetration in Africa still remains a challenge for most countries.

Several studies have investigated the current status of ODeL infrastructure in African Universities. For example, Kasse and Balunywa (2013) investigated the level of implementation of e-learning in Uganda using four Ugandan institutions of higher learning namely Makerere University of Kampala (MAK); Makerere University Business School (MUBS); Kampala International University (KIU), and Islamic University in Uganda (IUIU). Findings of the study revealed a major infrastructural, technical deficit hindering the smooth running of ODeL among the institutions. Other findings include 80% use of e-learning solely for learning material delivery, online discussion (12%), conduct of assessment (2%).

A study conducted in Zimbabwe by Mpofu et al., 2012 revealed that (97.5%) of lecturers participating in ODeL had no experience in distance education. Similarly, in Kenya, the scenario is not different from other African countries. The study by Nyerere et al. (2012) using Kenyatta University and University of Nairobi as case study revealed that effort by ODeL providers were not guided by national policies. In addition, delays in the production of course materials, inadequate funding, low teaching staff among others are hindering the effective implementation of e-learning. A study conducted on the status of ODeL in Rwanda by Mukama (2016) focused on University of Rwanda (UR). The study reported that UR uses different Learning Management Systems (LMS) and that all the 13 UR campuses are connected to a fibre backbone. The total Internet bandwidth is 318 Mbps, which costs UR RWF15, 433,266 per month. The average Wi-Fi coverage is estimated to be 48%. The student-to-computer ratio is 9:1 with a number of PCs = 4,781, number of computer labs = 80, number of PCs in computer labs =3,430, Campus LAN, Campus Wi-Fi. The study also reported an ongoing initiative to equip students with laptops, MODEM and data on a loan basis.

In South Africa, a number of universities have adopted various e-learning technologies in their campuses. The University of South Africa (UNISA), University of Cape Town (UCT), University of South Africa (UoSA), North West University (NWU), and University of Western Cape (UWC). UNISA for example, the Sakai system has been adopted to facilitate interaction between lecturers and students as well as distribution of e-resources. The study also shows that 96% of student instructors who use the Sakai system assesses the system more frequently (Venter, Rensburg and Davis, 2012). On the other hand, the University of Cape Town had adopted WebCT with over 25,000 learners on it and lecturers equally using it for online lectures Bagarukayo and Kalema (2015).

Studies emanating from Kenya have revealed an appreciable number of universities adopting various technologies for ODeL Muuro et al., 2014. These include: University of Nairobi (UoN), Moi University (MU), Egerton University (EU), Kenyatta University (KU), Jomo Kenyatta University of Agriculture and Technology (JKUAT), Maseno University (MAU), and MasindeMuliro University of Science and Technology (MMUST). Moodle learning management systems have been adopted by most of these institutions for online learning and delivery of course materials.

The study by Mtebe and Raisamo (2014) revealed that over 80% of universities in Tanzania use Moodle in combination with other technologies for ODeL. In order to boost infrastructure, the University of Dar es Salaam (UDSM) has been on the SEACOM optic fibre cable since 2008 which is currently on 155Mbps. Due to the cost of annual subscription, the university migrated from the Blackboard Moodle system.

# The assessment of new perspectives on Quality for open, online and flexible learning in the African region for the future

COVID-19 pandemic and close down of schools has really raised the concerns of countries, higher education institutions and teachers to use their initiatives to find alternative ways of transmitting knowledge and equipping the teachers and learners to acquire the needed skills that will enable them to continue to promote teaching and learning online.

Most students are still at home due to the closure of schools. Reopening of schools are in phases. In Nigeria only final year students have been called back to sit for final year examination. Universities remained closed down, not even the final year students have been called back. It is certain that there is hope for the future of open, online, blended and flexible learning in Africa because COVID-19 pandemic is compelling each country and stakeholders to be concerned on how to continue to transmit knowledge in difficult circumstances. Most universities in Nigeria are now acquiring infrastructure for online learning.

State Governments in Nigeria have started developing platforms for online learning for their various institutions at all levels of education. Some countries hurriedly engaged some firms to deploy online learning platforms for secondary schools and universities.

Capacity building on online learning platforms is on the increase. Recently, over 150 university lecturers in the National Open University of Nigeria participated in a Special Quality Assurance Training on how to host and create a Virtual Learning Environment on a Moodle platform.

## Foreseen challenges include:

- 1. The National Policy on Education in most African countries has not embraced online learning. This remains the case up till now for most countries. Even those countries that have embraced online learning are just making make-shift arrangements without a very rich guideline entrenched in their education policies.
- 2. The issue of data still remains a challenge for most students and staff as to who will provide data for online learning. Most parents can't afford data for their children.
- 3. Erratic power supply is still a challenge for most countries as to how laptops, computers and mobile phones can be powered for the NEW Normal way of life.
- 4. Internet penetration is still a challenge for most countries. Hard hit in this area are those living in the rural areas.
- 5. Acquiring quality proctored assessment tools is another big challenge. Most institutions do not have the capacity of acquiring such tools.

# **Arab Region**

Dr. Souma Alhaj Ali Hamdan Bin Mohammed Smart University, Dubai, UAE

# Impact of COVID-19 pandemic in the growth of open, online, blended and flexible learning in the Arab region

COVID-19 pandemic has been uncharted waters for the entire global community. Figures released by UNESCO revealed that no fewer than 850 million children and youngsters were out of school after governments around the world closed schools and universities as a precautionary measure against the spread of the virus. This massive education disruption interrupted the normal process of learning for millions of children, teenagers and young adults around the world and obviously in the Arab region. Furthermore, some of the Arab countries continue to witness conflicts and crises, the armed conflicts in Syria, Iraq and Yemen brought the number of regional out-of-school children to over 14.3 million. For some who can even access school, the possibility of learning in a classroom is jeopardized by continued conflicts. More than 8,850 education facilities in Syria, Iraq, Yemen and Libya have been attacked and destroyed leaving them incapable of hosting students for education purposes. Crises increase the vulnerability of children and youth and gender inequalities, with girls often more at risk to be out of school.

#### Scale of Growth

It's very hard to find formal comprehensive reports on the number of students in the Arab world, but one report indicated that the number is not small. In some parts of the Arab world, such as Iraq, Saudi Arabia, Algeria, Morocco and Sudan, there are more than 7 million students at all levels of education in each country, with more than 25 million students in Egypt alone. In less populous parts of the Arab world, students make up about one-fourth of the population.

#### **Perceived issues of Quality**

To cope with COVID-19 pandemic and to ensure the continuity of the educational system some Arab countries offered students distance and online education as a good and safe alternative to face-to-face education like UAE, Saudi Arabia, and Jordan. Aside from the very few smart or online universities, schools and conventional universities faced many administrative and operational challenges in adopting online learning including teachers' and students' capabilities in online education, access to the internet, availability of laptops and tablets, availability of digitized content, quality assurance, and authenticity of assessment and examinations.

#### Assessment and examinations

Issues related to online assessment were very common, some universities and schools changed the type of the final assessment, whenever possible, to projects or broke them into smaller assignments, others used open-book take home exams or relied on technological solutions to offer online proctored exam, overall, ensuring the authenticity of assessment and the ability to use a pedagogically sound assessment seemed to be a common challenge.

#### Reputation of open, online, blended and flexible learning

Students seemed to adapt to the use of technology very quickly and enjoyed the comfortable arrangements and many features of online education. Parents appreciated the safe environment associated with online education and the fact that their kids did not lose the academic year, however, some of the parents, especially with kids in the elementary level, faced pressure to assume more responsibilities to support their kids' education including joining them in attending their online classes and supporting them in managing assignments and online assessments. Accordingly, some of the countries like UAE, enabled mothers to work from home to be able to support their kids, other countries, like Saudi Arabia, postponed the starting of the school day for elementary schools (Grade 1 to Grade 6) to 3pm to allow working parents to facilitate their children's classes. Egypt for the other side pushed back the beginning of the school year to October instead of September as a result of the spread of the coronavirus.

#### **Access and Inclusion**

To enable the transition, governments in some of the Arab countries partnered with organizations in the public and private sectors to support the transition to distance and online learning. A good example was the collaboration of Hamdan Bin Mohammad Smart University with the ministry of education in UAE in developing and offering free online courses to teachers and faculty members to enable them to teach effectively through a digital educational platform. More than 130,000 participants registered' in the two courses "Be an Online Tutor in 24 Hours" and "Design an Online Course in 24 Hours", participants came from 106 countries around the globe, including UAE, Saudi Arabia, Egypt, Kuwait, Bahrain, Jordan, Oman, Iraq, Syria, Morocco, Palestine, Sudan, and Lebanon. In response to the significant demand, some online learning platforms offered free access to their services, private sector in some of the Arab countries supported also with offering free or affordable internet access and laptops and tablets to some students in need.

## Acceleration of digital transition

While the transition succeeded in ensuring the continuity of the educational system and reduce the spread of the virus, the capabilities of the universities and schools varied, with some of them seem to be more knowledgeable and experienced with online learning (in terms of pedagogy, technology, and overall experience) compared to others who actually ended up providing distance learning with limited interactivity and students' support.

# The assessment of new perspectives on Quality for open, online and flexible learning in the Arab Region for the future

Maybe the biggest lesson learned during COVID-19 pandemic is that online learning is an effective, safe, and affordable alternative to conventional face-to-face learning which is believed to have positively impacted the growth of open, online, blended and flexible learning in the Arab region. Universities and schools were pushed to experience online learning first-hand, which resulted in the largest "online movement" in the history of education in the Arab world. While the unplanned and rapid move to online learning – with insufficient training, bandwidth, and little preparation – was overwhelming in the beginning and may resulted in a modest user experience in some cases, it certainly revealed many advantages for online learning, and as a result, the changes coronavirus have caused to education might be here to stay. It is expected that the adoption of online learning in the Arab region will continue to persist post-pandemic.

If not entirely online, many universities and schools are expected to continue using online learning for some of its offerings or courses, a good solution at this stage is to adopt a blended learning approach where some of the courses to be delivered online while other courses or activities to be delivered face-to-face like some of the performance arts courses or laboratories or proctored physical exams.

There are, however, many challenges to overcome, some of which could be done at the school or university level, others need an intervention from the government like access to the internet and bandwidth, availability of laptops and tablets. Government support is essential to enable the transition, for example, it will be much more efficient for government to develop digitized content and learning resources for K12 and make it available for all K12 students rather than requesting each school to develop its own content especially that most of the content at least for the elementary and intermediate school is almost common. Government can also support the basic teachers' training and to leave the advanced training to each school so to be done and customized according to the platforms used in that particular school.

Assuring the quality of online learning is another challenge, apart from UAE, very few countries in the Arab world have standards for quality of online learning. Actually, prior to COVID-19 many countries in the Arab world did not even recognize certificates and degrees obtained via online learning. It is vital for schools and universities across the Arab world to assure the quality of all aspects related to online learning including organizational, technological, pedagogical, assessment, faculty and technical staff qualifications and professional development, digitized content and learning resources, student support and extracurricular activities, risk management, information security, and business continuity. Moving further demands establishing a common understanding and criteria for quality of open, online, and technology-enhanced education to assure the provision of individualized, engaging, and intellectually stimulating learning experiences that challenge students to higher order thinking and motivates critical thinking and deeper learning.

# **Asian Region**

#### **Professor Ojat Darojat**

Universitas Terbuka and Asian Association of Open Universities (AAOU), Indonesia

This report describes the situation of education in Asia, especially distance higher education, during the COVID-19 outbreak. Some distance teaching universities (DTUs) in Asia including Universitas Terbuka (UT), have taken important roles during the pandemic situation. It is a fact that single mode DTUs have been designed with infrastructure and human resources utilizing the principles of resource sharing (partnership, outsourcing, and sharing economy) as well as optimizing the digital ecosystem. The report is supported with some references from journal articles and material presentations on some webinars conducted during the COVID-19 pandemic. To enrich the report, a webinar series on open and distance education, namely Knowledge Sharing Forum (KSF), has been conducted by my university since June 2020. It involved some experts in open and distance learning (ODL) from different higher education institutions and from the Ministry of Education and Culture of the Republic of Indonesia and some ODL practitioners from different countries in Asia were invited to share their knowledge and experiences in giving solutions during the COVID-19 crisis. The various topics from the first up to the twelfth KSF were discussed on the webinars, such as technology integration in learning, models of online learning, the roles of IT architecture in building quality online learning, and other relevant topics (UT, 2020). Moreover, since I was also appointed the President of Asian Association of Open Universities (AAOU) 2020-2023, the report was also enriched with some references and experiences shared by ODL practitioners from other countries in Asia such as Malaysia, Hong Kong, Philippines, and Pakistan, who were invited as the keynote speakers on the AAOU Presidential Speech Series discussing the educational movements during the crisis as well (AAOU, 2020).

# Impact of COVID-19 pandemic in the growth of open, online, blended and flexible learning in the Asian region

#### Scale of Growth

The people of Southeast Asia are considered the most engaged internet users in the world. As reported by Google, there are at least 360 million internet users in Southeast Asia and around 90% of them connect to the internet mainly via their mobile devices. The region's internet economy reached US\$100 billion in sales in 2019 and the figure is expected to triple by 2025 (Jamal, 2020).

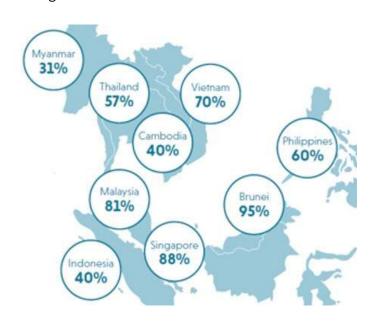
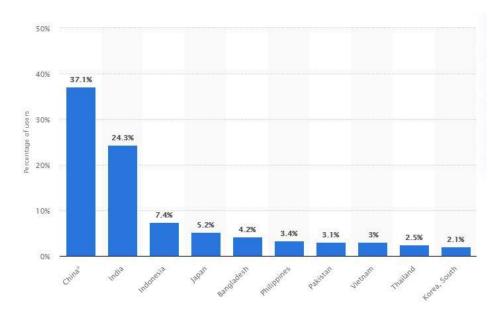


Figure 1. Internet Penetration in Southeast Asia

Source: World Bank (Adopted by Teter & Wang, 2020).

This is a tremendous feat compared to many other regions and the growth in internet and mobile usage is now an asset during the pandemic. It also means that Southeast Asia has mobile and internet infrastructure if governments in the region decide to increase access to quality internet throughout the region. Like other countries in the world, educational institutions in Southeast Asia employ virtual and distance learning. However, the sudden shift to online schools has raised concerns about whether Southeast Asia's education system is equipped for a rapid increase in digital learning. It is also important to note that the pandemic has also influenced the numbers of internet users in Asia. The following chart shows the countries with the biggest share of internet users in Asia as of May 2020.



Source: Statista, 2020

The chart shows that based on the geographical analysis, China ranked first, accounting for 37.1 percent of internet users in Asia in May 2020, followed by India with 24.3 percent.

Three months since the World Health Organization (WHO) declared a public health emergency of international concern over the new coronavirus, a clearer picture of the sectors, regions and demographic groups at risk emerged. By the end of April 2020, 1.2 billion (73.8% worldwide) students and youth worldwide were affected by the closure of schools and universities due to the COVID-19 outbreak. In Southeast Asia, the region is experiencing the impact and disruption of education and what is needed for the future (Teter & Wang, 2020). Regarding the obstacles to increase productivity, COVID-19 has caused many problems related to the three key factors of community productivity, namely education, health, and social stability (social safety nets, peace, etc.) more seriously in developing countries.

The World Bank states that assistance to education in developing countries needs consideration for three reasons. First, a humanitarian perspective (education as a human right). Second, peace building in the world (political, economic, and social stability in developing countries) and conflict prevention (armed strife, refugees, ripple effects on the economy, etc.). Third, global economic development (links through global value chains and future markets in the global economy). Compared to Singapore and Malaysia, Indonesia still needs institutional support, human resources, and business sophistication. The low of Indonesia's Global Competitiveness Index and Global Innovation Index are caused by the lack of Indonesian human resources with the capacity to innovate and utilize ICT as illustrated in the following chart.

Indonesia Singapore Differences with Differences with Indonesia Indonesia Institution (53)2 5 **HR and Research** 6 (21)3 Infrastructure 6 5 (44) 2 5 arket Sophistication 5 (49) 8 4 **Business Sophistication** 3 (26)9 4 Knowledge and Technology 5 3 Output (18) 1 2

Figure 3. Comparison of Indonesia's Global Innovation Index

Source: Global Innovation Index Report, 2019

Creative Output (24)

3

3

During the early COVID-19 outbreak at the end of 2019, the emergency remote education has become the best alternative to be practiced ensuring the continuity of education (Bozkurt et.al., 2020). In China, the pandemic occurred in the end of 2019 and to ensure that there was no disruption of learning and teaching, the mid-February the Ministry of Education issued the guidelines on online teaching organization and management for higher education institutions.

India as the largest democracy and the seventh largest country in the world, with more than 1.3 billion people, had the first case of COVID-19 on January 30, 2020 which spread until May 22, 2020 reaching 66,330 COVID-19 cases. When the infection starts to spread a little faster, on March 30, 2020, the Faculty members/researchers are advised to work from home and take advantage of this period for various academic activities such as: developing online content, online teaching and online evaluation; prepare lesson plans and develop teaching materials for these courses offered during the following academic year/semester; doing research, writing papers/articles; prepare innovative questions for question banks and prepare for innovative projects.

Japan, which planned to be the host for the 2020 Summer Olympics, must delay the event in March 2020 due to high COVID-19 cases reaching 14,831 as of May 2020. Japan announced the school closing at the end of February 2020 affected more than thirteen million students. By offering some kinds of self-learning support by sending print materials via email or pre-recorded video lecturers shared on YouTube or online platforms, and some cram schools (private, for-profit, fee-paying prep schools) offered totally online courses.

The Indonesian government, for example, launched a policy of transforming the school practice into online learning for the first time on March 2, 2020. In the following week, the Minister published a letter of circulation for schools' activities from home and starting from March 17, 2020 all students were totally doing school activities from home. Regarding the learning activities in higher education, there were 832 offering online learning and on April 9, 2020, 98% higher education institutions applied online learning systems. The Ministry also conducted a study on the needs and programs, especially for higher education, to be developed during the pandemic situation. First, the Indonesian government focused on the learning access for the frontier, outermost, and developed regions. As an archipelago, the number of students living in such regions is high. Second, the government's support was also given in the form of funding for students and teachers' internet connection and students' school fees. The funding was allocated for more than 1,000 students from semester 3, 5, and 7. For teachers, training on online learning is conducted with 107,054 lecturers. Third, the government focused on building the infrastructures, such as strengthening the online platform (SPADA), servers and bandwidth, as well as national webinar platform (Umeetme, CloudX), and also preparing Indonesia Cyber Education (ICE) Institute. Last, implementing the program of teaching on campus to support the basic education.

The pandemic has drawn out what skills and competencies are needed to be prepared for a crisis COVID-19. The need for digital literacy for students, parents, and teachers emerged as paramount emergency distance education. Beyond digital literacy are critical digital literacy needs to refer to with the expertise to critically analyze information and analyze the authenticity. The development of digital literacy is in line with people's interest in using the internet connection for information and communication.

For example, the digital trend in Indonesia shows that more than 60% of the population are familiar with the use of the internet and social media which have also taken their interest because the channels of the social media are fast, various, and massive offered with different forms of information.

Figure 4. Digital Trend 2020 in Indonesia



Source: Hootsuite (2020)

Lessons learnt from the Asian countries which are dominantly developing countries are that the COVID-19 has brought about challenges and data that has never been short of teachers, students, and parents before, has offered the schools, including DTUs, the opportunity to finally move forward with preparation to improve their ICT and e-learning readiness by upgrading classroom infrastructure, increasing capacity build teachers and students, develop flexible policies and academics, create changes in perceptions of online learning.

### **Perceived Issues of Quality**

It is very important to be reported that during the COVID-19 pandemic, teaching and learning from home have become common practices in Asia. Teaching and learning from home has become a new jargon reflecting the practices of distance education especially in Indonesia, Malaysia, and Philippine. In Indonesia for example, not only UT as the only DTU in Indonesia but also all conventional universities and all primary and secondary schools have put a lot of effort into developing and implementing distance education practices. In spite of the strategic role of distance education in providing and maintaining access to education during the pandemic, there are several challenges that these new practices face; for example, the lack of support and services such as providing teachers and lectures who have capacities to teach in distance; issues appeared about the difficulty in oversight of learning delivery involving synchronous and asynchronous platform. Besides, there were also strategic problems dealing with student support services including academic and logistical elements. Infrastructure and access points have also exacerbated the quality issues. Distance education especially in terms of online learning services has become a major issue in developing countries in Asia.

The COVID-19 pandemic provides an opportunity for all to reflect on how to maintain quality higher education and ensure equitable access for all. Several principles of action emerge to guide our collective response in Southeast Asia and the wider region. First, we need to build a supportive and inclusive ecosystem, including quality assurance and recognition of online and blended learning programs, infrastructure development, institutional strategic planning, budgeting and capacity building, and sustainable professional development programs for teachers. Holistic support for learners is also important as they face isolation and uncertainty about the future of work. The second principle of action is commitment that values justice. The Asia-Pacific Regional Convention on the Recognition of Qualifications in Higher Education, more commonly known as the Tokyo Convention, is an instrument for providing fair and transparent recognition of qualifications. To date, no country in Southeast Asia has ratified or implemented the Convention. This missing legal foundation is a weakness at the level of effective policy since the introduction of multiple learning paths, including online learning. Blended learning, multiple and direct synthesis will become the 'new normal' which will combine not only online and offline learning, but also formal, informal, and non-formal learning. And finally, the main principle of action must be to ensure security, research, and higher education with local needs. As few faculties and higher education institutions will have the capacity available to serve globally, most providers will have to assess their place-based relevance, considering the COVID-19 and its impact as well as the relevance of leadership, innovation, and local stakeholder interaction to rebuild a curriculum that encourages human development and creativity to respond to future challenges (Teter & Wang, 2020).

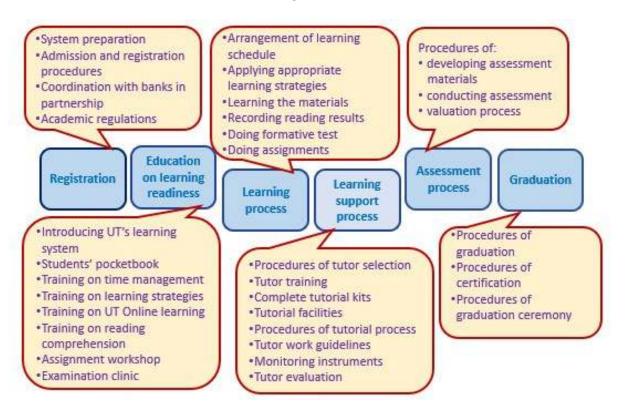
Regarding the quality assurance (QA) of online learning, Sugiyono (2020) described how higher education institutions (HEIs) in Indonesia responded to COVID-19 outbreak as follows.

- 1. The responses of HEIs to the pandemic varies worldwide depending on institutional resources, experience, and digital resources accessible to learners.
- 2. On the positive side, COVID-19 achieved what governments, authorities, learners, investors, and other stakeholders could not get done over the last two decades teach or go online!
- 3. Many institutions are just responding as best as they can by doing remote classes, no plans moving forward, and in most cases are thinking of returning to campus-based teaching with probably a little more supplementary online teaching than before COVID-19.
- 4. Institutions are not convinced that online classes are as effective as the campus-based experience. So, it might not result in wholesale changes.
- 5. HEIs must not just push more courses online. Online is just a tool. It is not inherently better or worse. It is how it is used. The focus should be on learning, not online or offline. The HEIs must relook at what creates unique value in campus-based classes and retain them whilst discarding the valueless activities and find ways to combine this with the possible value in online mode.
- 6. Both HEIs and quality agencies might have to think, plan, execute and change in two modes, campus-based and online simultaneously.
- 7. Institutions might still retain a large to significant part of the delivery in the traditional form because for the younger and full-time learner, the degree is not all about knowledge gain. It is the college experience which goes beyond classroom to extracurricular and social experiences. Online is popular with the adults, older and also working groups who cannot afford the full degree experience or just not possible even if they are like it due to their careers.

There are six points related to quality assurance for online that go beyond conventional teaching and learning. First, is the curriculum designed for online learners or just delivered online? This is the case with most universities now. Second, the learning materials are neither self-instructional nor multimedia. Third, the university services are not ready or optimized to support remote online learners, which is extremely important for postgraduate programs, and science and technical programs. Fourth, a LMS that is flexible, integrated, accessible, friendly, and interoperable is a must. Fifth, faculties must be trained to develop lessons online and use the LMS and other tools. Synchronous lectures must be supported by at least 50% asynchronous learning activity. Sixth, assessment must also be thoughtfully developed knowing face-to-face proctoring is not always possible or practical. Plagiarism is a major concern.

All Asian DTUs have been equipped with their internal quality assurance system. UT, my workplace for example, has implemented the Asian Association of Open Universities (AAOU) QA framework since 2003 and does both internal and external reviews frequently based on the review guidelines. The following is the example of the QA review on UT students' learning process.

Figure 5. Example of QA for UT Students' Learning Process



Source: UT's Centre for Quality Assurance (2020)

The AAOU QA Framework focuses on 10 components with 53 sub-components. The components are 1) policy and planning, 2) internal management, 3) learners and learners' profiles, 4) infrastructure, media, and learning resources, 5) learners' assessment and evaluation, 6) research and community services, 7) human resources, 8) learner supports, 9) program design and curriculum development, and 10) course design and development (AAOU, 2020). The quality of UT is also reviewed by International Council for Open and Distance Education (ICDE) focusing on the enhancement of the quality of student supports, the quality of student learning processes, and students' perspectives for institutional evaluation (ICDE, 2020).

Starting in 2019, AAOU has assigned a new team building with a specific purpose to develop a quality framework for accreditation purposes. The team building consists of people from Philippine, Indonesia, Malaysia, Hongkong, Pakistan, and Cambodia. This new project has been developed in response to current demand from different countries in Asia who need international acknowledgement. In Indonesia for example, the ministry of education and culture has launched a new key performance indicator for study programs that must hold international accreditation. Currently, the AAOU quality assurance toolkit has been developed and ready for use for 2021.

#### Assessment and Examinations

The COVID-19 pandemic has significantly influenced the learning process, including the learning evaluation or assessment. Based on the experiences of dealing with assessment problems during the pandemic situation in several countries, distance education and online learning vary from region to region, from tertiary, secondary, and even primary levels of education, from teacher to teacher, and from student to student, all experiencing different things. But in principle, everyone is doing their best in this unique situation, and the most important thing is how to develop a lot of planning to result in a more coordinated response in an uncertain future (Bozkurt, et.al., 2020). It is important for all of us to develop our capacities for self-learning in online and open learning, support for online learning and development, research to bring evidence to policy and practice, and expert leadership to pave the way for a new future. Undoubtedly, it requires more online and open learning and multi-access learning as we find ways to recover from the crisis.

Along with the development of the situation in some Asian countries, DTUs must inevitably consider more effective and practical solutions in conducting final semester exams. Some issues in relation to the final examinations are connectivity, cost, electricity, and access to online platforms. The Ministry of Human Resource Development (MHRD) of India issued a regulation on adopting adequate precautionary measures like rescheduling all ongoing university evaluation and examinations after March 31 (but it looks it may not happen before June or July). State council examinations, recruitment exams, university-level examinations, and entrance examinations have been postponed across the country due to the coronavirus outbreak and a nationwide lockdown. Entrance examinations have also been postponed. The education system in schools, colleges, and universities across the country was badly affected by the ongoing situation (Sareen, 2020).

In Indonesia the Minister of Education and Culture issued two policies regarding the student examinations. First, the cancellation of the national examinations. The Minister stated that the cancellation of the national exam due to the COVID-19 pandemic would not affect graduation or enrollment at higher levels of education (Jakartapost.com). Second, the adjustment of school examinations. There were several options the government and lawmakers were looking at to replace the national exam, one of which was to use assessments based on cumulative grades on students' academic report from three years of study for junior and senior high school students, as well as six years of study for elementary students. Additionally, the school will calculate the grades considering all aspects of the report cards, including curricular and extracurricular activities.

The pandemic situation in other countries, such as China, Myanmar, Hong Kong, Japan, and Korea, had a great impact on the examinations, especially university entrance exams. Japan entered its second term of university entrance examinations as scheduled in late February 2020, but on 27 February Prime Minister Shinzo Abe on 27 February ordered all primary, secondary, and secondary schools to close from 2 March to early April, and Hong Kong, with closing extended schools and universities, were badly affected. China did not set a new semester opening date for universities but left it up to provincial authorities to set a reopening time after the virus outbreak is effectively under control in each province. Hong Kong carried out a school closure until April 20 which effectively suspended the entire school term even though the school's city education bureau stated that written tests for university entrance examinations would be held as planned from March 27. However, the impact turned out to be greater than elsewhere such as schools and university classes which were suspended in November last year due to anti-government protests and student learning has been affected by months of disruption.

## Reputation of Open, Online, Blended and Flexible Learning

Asia-Pacific is expected to be the fastest growing regional segment in the upcoming years, with the highest Compound Annual Growth Rate (CAGR) of 19.75% during the forecasting years 2019-2027. The LMS market in Asia-Pacific is analyzed across countries such as India, China, Japan, Australia, South Korea, and the remaining countries collectively forming the Rest of Asia Pacific regional segment. Numerous countries have adopted LMS solutions owing to the growth in penetration of mobile e-learning platforms and web-based learning modules. Industry participants have realized the importance of effective integration between connected devices in the e-learning process. The increasing mandate for LMS solutions and growth in the education sector, for instance, the web-based and distance learning modules, are expected to drive the market growth in the Asia-Pacific region. Organizations also employ the LMS for driving skill development, employee training, and succession planning and are further used as learning platforms for compliance training by a government agency as well as an onboarding tool for new hires (Market Research, 2020).

Surviving during the COVID-19 requires building support communities, sharing tools and knowledge, and listening to different voices (Bozkurt, 2020). This unique nature of the pandemic places parents as the first-line responders for children's survival, care and learning' (Devercelli, 2020). With children learning from home, parents have suddenly had to learn how to become educators.

For parents who have access to the internet and are working remotely from home, they had to balance facilitating their children's learning with attending to their day jobs. The pandemic has forced the schools and parents to create a more intensive communication and understanding of each other to facilitate students' learning process. Therefore, parents who never get involved directly in school activities must learn more about distance learning or online learning.

The terms online learning, virtual learning, e-learning, distance learning, and blended learning are unique. Each refers to the act of using technology in learning, but how students engage in that process is slightly different (ConexID, 2020) as seen in the following chart.

Distance
Learning

Online
Learning

Virtual
Learning

E-learning

Figure 6. Online Learning as the Incision

Source: ConexID (2020)

Online learning always deals with an internet connection and can include virtual face-to-face interactions (webinar, online lecture, and virtual meeting) that uses online tools for learning, such as online curriculum, and could be considered a mix of virtual meeting and blended learning. Virtual learning is delivered through the internet, software, or both and can be used inside or outside the physical building of the education organization. E-learning has a bigger scope than online learning because it utilizes digital tools for teaching and learning with technology facilitation, and students take a course from a teacher but only interact with the teacher online. Distance learning has the same structure as online learning, but it enables teachers to provide instructions in a different time and place than that of the teacher and other students. Blended learning is the combination of classroom and virtual learning.

During the COVID-19 pandemic the online learning has been the best alternative for students and teachers. There are some benefits of online learning. First, it applies the principles of student-centered flexibility in which every student has his or her way of learning that works for them. Second, students can attend classes and courses anywhere with a computer and access to the internet. Third, it has given students a better opportunity to choose from various schools and courses. Fourth, in terms of accessibility, online course materials can be accessed 24 hours a day every day. Fifth, online learning offers a lot of savings because there are no additional costs for transportation and accommodation. Sixth, students are exposed to knowledge shared by the instructors around the globe which cannot be learned in books. Seventh, students may not have to sit for long periods of time. Lessons can be paused when needed, and notes read at will. The following is the illustration of the benefits of online education.

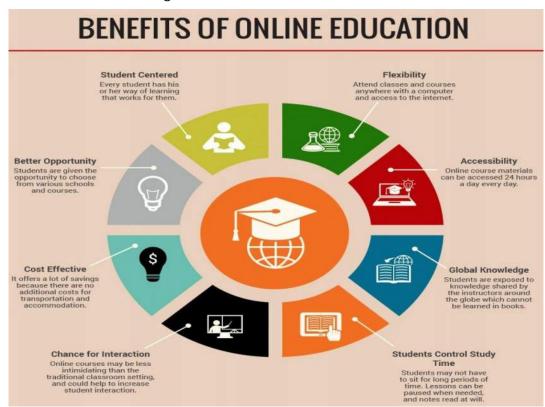


Figure 7. Benefits of Online Education

Source: https://visual.ly/community/Infographics/education/benefits-online-education-2

The Indonesian government has indeed issued various laws and guidelines that encourage universities to implement distance and online learning, but not many universities take advantage of it. One of the programs is called SPADA which is a program to encourage the development and dissemination of open educational resources or OER, massive open online courses (MOOCs) and online courses. Until now, there are more than 200 universities that participate in this program.

Moreover, the establishment of Indonesia Higher Education and Research Network – INHERENT in 2004 has also contributed as a network of universities from various provinces in Indonesia. In 2011, more than 300 universities joined INHERENT (Belawati & Nizam, 2020). Education in Indonesia was totally under the control of the Ministry of Education and Culture during the COVID-19 Pandemic. The Minister launched a circulation letter No. 4/ 2020 about the Education Practice during the COVID-19 Pandemic. The pandemic situation forced all the students and teachers to do "Learning from Home" or Belajar dari Rumah (BDR).

There are three important points stated in the regulation. First, learning from home must be conducted through online platforms/distance learning and should give meaningful learning experiences. Second, the learning activities must be focused on life skills. Third, the learning activities must be conducted based on students' motivation and conditions by considering the access and facilities gaps (Moeldoko, 2020).

Figure 8. Online Learning Portals Officially in Partnerships with Indonesian Government



Source: The Ministry of Education and Culture - Indonesia

As a country with the second largest population in the world as well as a great economic, social diversity structure, India has shown good leadership in taking steps to contain the virus. The education sector has been significantly affected. There was a sudden surge in the switch to Internet-based teaching. Every day, hundreds of webinars were held. It is interesting to note that many teachers register for webinars or faculty development programs only to obtain a certificate of participation useful for them for their promotion. Due to the lockdown, there is no alternative, students are required to attend online classes. Complaints and challenges were brought to the attention of teachers and administrators, who stood out among them that many students did not have computers or laptops in their homes. The simultaneous online scheduling of classes by teachers suppresses students' net data plans, which they normally earn 1.5 Gb per day and deplete quickly because the consumption of

video-based conferencing is more than the appropriate amount. There is another misconception that because all the students are at home, they have a lot of time. This wrong assumption has an impact on the implementation of household chores and the mental health of students (Sharma, 2020).

The challenge of the changes, speed, risk, complexity, surprise, has been another concern for the government during the COVID-19 pandemic. Students need to have capabilities in adapting themselves to changes, building accelerations in all aspects, taking risk of the policies constitutionally, facing complexity of globalization impacts, and responding 'sudden/surprise' as the impact of new technology development. Another trend in practicing online learning is partnerships between institutions and internet/LMS providers, between institutions and the governments, and between the governments and internet/LMS providers. From the picture above, it is obvious that many internet providers and LMS providers are getting challenges in offering their best services to support students and teachers doing online teaching and learning.

#### **Access and Inclusion**

Tutoring and mentoring during the COVID-19 outbreak have changed dramatically due to school closures. The challenges for higher education institutions varied based on the needs. For DTU students, online learning is not something new for them, whereas for conventional universities, doing online learning needs some effort because they are used to learning on campus, and during the pandemic they are practicing distancing. The conventional universities need to adapt themselves to three important aspects, namely learning materials, interaction process, and assessment. Li (2020) described the pandemic situation in sixty-one DTUs which are members of Asian Association of Open Universities (AAOU), focusing on how the DTUs provided more opportunities to students in online learning during the crisis. The following are the reports on some DTUs in Asia.

- Al-Quds Open University: Most of the university's concern was focused on proceeding with the
  educational process while ensuring the safety of students and staff, and therefore the face-to-face
  lectures were replaced by entirely e-lectures.
- Asia University: The online classes were conducted to replace physical classes. The university
  believed with the teaching and learning systematic system that they currently would run as usual
  and was improved as compared to before.
- National Open University: Face-to-face lectures were replaced by online lectures via Cisco Webex.
- The Open University of Hong Kong: All face-to-face classes were suspended until the end of the Spring term in May 2020. Learning continued online and such activities started on 3 February 2020.
- Wawasan Open University: All online tutorials for both open distance learning and on-campus learning students continued until 30 June 2020.

UT as an open DTU in Indonesia has to provide services to students who are spread across Indonesia and overseas. UT's head office is located in the city of South Tangerang, and it has 39 regional offices located in 34 provinces in Indonesia. Currently, the number of UT students reaches 312,565 students (Rector's Report, 2019). UT provides teaching materials packaged in various types of media, such as in print, audiovisual, and digital teaching materials. UT's learning materials are designed as self-contained learning materials that can be used independently in accordance with learning objectives to be used by students according to their respective learning speeds (Guido, 2014). The provision of various tutorials is due to the student's conditions, among others due to the geographical factors where the student lives and the availability of access to technology or the Internet. Face-to-face tutorial services are managed and carried out in regional offices where students are.

During the COVID-19 outbreak, UT has optimized the students' services for synchronous learning support. In the previous semesters, students in the remote areas were given f2f tutorials. However, in the pandemic situation, the governments have launched a policy for students and teachers to learn from home and UT developed online classes for tuweb in a short time as described in the following table.

Table 1. UT's Tuton and Tuweb Conducted in March-June 2020

	Online Tutorials (Tuton)	Web-based Tutorials (Tuweb)	Total
Number of Courses	1,118	437	954
Number of Classes	12,991	26,917	39,908
Number of students joining tuton and tuweb	153,598	147,335	300,993
Number of students registered in Courses	605,293	482,867	1,088,160
Number of Tutors	4,627	1,271	14,898

Source: The Centre for Students' Learning Supports of UT

Tuweb has been the best solution for UT to give students synchronous learning support services. There were more than twenty-six thousand students joined tuweb classes to get learning support in their independent learning processes. It shows that students have good perceptions toward this mode of learning, and they could access the materials as well as do real time interactions with tutors and other students.

Based on the review on practicing online learning at some DTUs in Asia, there is no best way for all cases, yet there are good solutions for individual cases because of some differences. First, the contexts are different in terms of resources and competence in the institution, as well as minor-environment. Second, the different stages of pedagogical and technological development influence the online learning practice, for example on students' and tutors' digital competence. Third, it is obvious that the levels of online usage and readiness of both teachers and students are also different. Fourth, another challenge in facing online learning is that the abilities of students to learn remotely are also different.

In terms of accessing learning materials for students in online learning practice, there are resources widely available. For example, Commonwealth of Learning (CoL) which offered itself to be an international partnership of distance and online learning for COVID-19 by creating cooperation and partnerships with Coursera in providing some micro-credentials courses. Moreover, UNESCO also took an important role in supporting schools, teachers, and students in facing the crisis. Additionally, in practicing online learning COVID-19 situation has given meaningful experiences to teachers and students in terms of being self-directed, ubiquitous, student centered, and flexible. Consequently, there are some challenges for practicing effective online learning. First, online courses must have the same quality as face-to-face teaching courses. Second, online courses emphasize three aspects, i.e. flexibility in learning (institution to provide suitable choices), customization of curriculum (curriculum to be adapted to learning needs), and autonomy in learning (student to be able to master their learning).

#### **Acceleration of Digital Transition**

The last few years have seen tremendous growth in internet access and mobile phone use in many Southeast Asian countries. Affordability remains another important issue in access to quality internet in Southeast Asia. Income inequality has increased in Indonesia, Laos, Singapore and Vietnam over the past few years. A report from the Organization for Economic Cooperation and Development (OECD) states that internet prices are high relative to income levels and wealth distribution, especially for segments of the population that are economically disenfranchised. This may be one reason why the demand for lower data costs remains one of the main complaints of internet users in Southeast Asia. Furthermore, the OECD stated that rural Southeast Asian residents are experiencing a substantial digital crisis which accounts for the shortage and reduction of options due to the generally higher investment costs required to build communication infrastructure in rural areas compared to the costs in urban locations. All these issues do not bode well for online learning during a pandemic. Simply announcing a move to online classes is not going to automatically result in universal access to quality internet. The governments must find solutions to meet the challenges, especially during the recovery from the crisis.

Facing the new normal and Industrial Era 4.0, educators and students must learn and improve the new literacy (data literacy, technology literacy, human literacy, and lifelong learner) and 6C's characters, i.e. collaboration, critical thinking, creative, communication, computational thinking, and compassion (Fullan & Scott, 2014). Therefore, higher education institutions and lecturers need to be concerned with the introduction of Learning Skills for the 21st Century for all undergraduate learners. Open University of Malaysia (OUM), for example, is committed towards creating an education experience that meets the needs of 21st Century workplace demand. The modules will provide better understanding on diversity and globalization among learners. The modules promote at least 4Cs (Creativity, Critical Thinking, Communication Skills & Collaborative Skills), Numeracy, Global Citizenship, Sustainable Development Goals, and Environmental Education (Fadzil, 2020). Furthermore, OUM also conducts capacity building for academic staff, such as inclusive instructional design, designing an interactive learning environment that provides personalized support for every learner, and embed learning design to create engaging learning activities.

Consequently, there are developments of digital technology that are divided into three conditions. First, the condition of faster mass adoption. The time it takes for electronic devices to achieve mass adoption is accelerating and is becoming a global phenomenon. Second, ICT has become a global trend. The development of digital technology has dominated various fields in the business/economic world. Third, government support takes an important role in the technology acceleration. The government is currently declaring Indonesia as the largest digital economy in 2020 and is targeted to be the largest in Southeast Asia. One of the foundations of national development in this declaration is the digital sector.

Hertono (2020) describes the digital development and acceleration at University of Indonesia, one of the oldest universities in Indonesia. There are some issues arise during the COVID-19 that higher education institutions need to concern and get the best solutions, especially in conducting distance and online learning, i.e. IT literacy, application system, characteristics of the course, infrastructure, policies, and quality standard. The following is the descriptions of the issues, the problems, and the strategies offered to solve the problems as shown in Table 2.

Table 2. Issues and Strategies

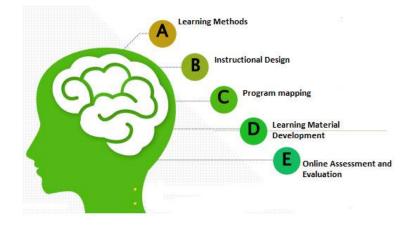
Issues	Problems	Solutions
IT Literacy	many students and teachers are lack of IT skills	Capacity Building Training on e-learning Training on distance education management Training for e-learning facilitators Training on online evaluation Help-Desk E-Learning development of media content The use of Learning Management System (LMS) Technical supports on e-learning application and facilities Pedagogical Services
Application System	features for essay online assessment integration with other information systems big number of users	maintaining data collection on management system (troubleshooting) upgrading the LMS developing system integration developing OER applications embedding plug-in for anti-plagiarism

25	Characteristics of Courses	how to deal with some courses that still need to do face-to-face learning, such practicum	the implementation of blended-learning (focusing on the courses with laboratory practicum, field/clinic practice, etc.) enhancement of computer-aided instructions (CAI) application and computer simulations the use of webinar for remote learning the use of remote lab system
	Infrastructure	need to develop better infrastructure	developing IT infrastructure, such as LMS, OER, and internet TV.
	Policies	government policies on e-learning and face-to-face proportions and presence reports	<ul> <li>developing the operational policies based on the government's policies about distance and online learning</li> <li>developing guidelines and procedures of conducting distance and online learning.</li> <li>building network and coordination among the divisions</li> </ul>
9-	Quality Standard	instruments for monitoring and evaluation to measure the users' satisfaction and effectiveness of the online learning implementation	designing instruments for monitoring and evaluation (monev) conducting monev to measure the users' satisfaction as well as e-learning effectiveness.

Source: Hertono (2020)

The teachers' capacity building in distance and online learning also need to be conducted to optimize the quality of teachers. The following picture shows the components needed in teachers' capacity building.

Figure 9. Human Resource Development on Online and Distance Learning



Source: Hertono (2020)

There are capabilities and skills in conducting the distance and online learning that the teachers need to enhance, i.e. learning methods, instructional design, program mapping, learning material development, and online assessment and evaluation. Besides, the higher education institution must optimize the students' services by providing various learning facilities. In the early 2020, UT has achieved a big number of alumni, i.e. 1,808,454 graduates. Thus, UT has many challenges in building the Indonesian society's trust. UT must focus on strengthening skills and technology capabilities to increase human resource productivity and innovation. Indonesia's challenge in achieving demographic bonuses and technology-based mass education has created economic opportunities through global connectivity, such as UT networks, students, and graduates, as well as quality. Besides, UT must have human resource investment that has an impact on increasing productivity through innovation, by strengthening education systems and technological innovation. The following is the description of UT's student's learning facilities to enhance students' skills in technology as well as improve their knowledge.

Figure 10. UT's facilities for Students' Learning Process



Source: www.ut.ac.id

# The Assessment Of New Perspectives On Quality For Open, Online And Flexible Learning In Asia For The Future

During the COVID-19 pandemic that spread globally in December 2019, and spread all over Indonesia in March 2020, improving health literacy as infectious disease control will be extremely important in the future for both developed and developing countries (Iguchi, Y.M., et.al., 2014). Moreover, the governments must focus on issues affecting the education system during the COVID-19 pandemic and how to ensure a healthy, prosperous, secure future for students, while looking at how education can take an important role in promoting sustainable development and overall productivity in the long run by responding to the crisis we face today. In other words, the governments and education institutions at all levels are forced to do some adaptations and modifications to learning support services for students (APO, 2020).

Yarrow (2020) predicted that tertiary education systems can emerge stronger from the COVID-19 crisis in Asia. Therefore, governments and institutions must consider some aspects to build new innovations and possibilities for the recovery from the crisis. All educational institutions are getting their campuses and procedures ready for a "new normal" to welcome staff and students back. However, it seems that online learning will still take place in the new normal era. Therefore, educational institutions need to develop and diversify infrastructure, increase collaboration, and provide flexible learning pathways. Educational institutions must create a more agile and flexible system for digital pedagogy and develop low-tech innovations to give learning opportunities to students who are disadvantaged. Moreover, they should increase collaborations with public-private partners to ensure the quality of accessing innovative technologies, infrastructure, and digital skill training. Providing flexible learning pathways has also become the focus of attention on how to introduce more aspects of flexible learning into face-to-face courses as well as optimize the online learning practices. Governments also take important roles and responsibilities in the collaborations with educational institutions, including ensuring the quality, implementing the policies, and tackling the digital divide. Governments need to circulate the regulations for both developing and implementing quality assurance in online learning and flexible learning by focusing on accountability and transparency.

Furthermore, regarding the use of technology to support students' learning, governments must develop policies for the implementation of ethics and security of technology, including the use of data, a privacy extension, the guidance of citizen rights on the ethical use of technologies. Tackling the digital divide is also an important aspect the governments need to concern, especially education opportunities for students who are often excluded from innovations, such as those from poor families, living in rural areas, or marginalized in other ways.

The Indonesian government through the Ministry of education and Culture have conducted a national survey to some higher education institutions in Indonesia, and the following are the lessons learnt from the institutions and governments in the future. First, both the governments and institutions keep the best practices and improvement on some aspects such as the use of technology effectively and efficiently, improve the quality of online learning and increase the infrastructure.

The Indonesian government through the Ministry of education and Culture have conducted a national survey to some higher education institutions in Indonesia, and the following are the lessons learnt from the institutions and governments in the future. First, both the governments and institutions keep the best practices and improvement on some aspects such as the use of technology effectively and efficiently, improve the quality of online learning and increase the infrastructure. Second, the use of online technology must be increased to enlarge the accessibility and increase the quality of education including learning materials, learning activities, and the partnership with other universities. Third, online learning can enrich the students' learning experiences, but cannot replace the whole face-toface learning activities (physical activities). Last, teachers/lecturers need to adapt themselves to the transformations and change their roles as students' partners in exploring the knowledge and develop their potentials as well as their competences. Based on the lessons learnt from the national survey results previously discussed, the Indonesian government has elaborated on aspects to be prepared for living in the new normal era. First, the implementation of the program for freedom of learning (Program Kampus Merdeka) which needs to adapt to three things, i.e. 1) collaborative and interdisciplined online learning, 2) online inter-disciplined student's society-based activities, 3) independent project and research collaboration with lecturers, especially for social-economic society (Nugrahanti, 2019). Second, building and increasing online learning quality (including learning methodology, assessment, and management), students' and teachers' training/knowledge upgrading on online learning, and learning material revisions. Third, strengthening and improving the online learning platforms and internet connection infrastructure, for example the partnership with the Ministry of Communication and Information and internet providers, webinar platform "Merah Putih" (UmeetMe, CloudX, etc.), SPADA, and ICE Institute. (Ministry of education and Culture, 2020)

#### References

- Asian Association of Open University AAOU. (2020). AAOU Presidential Speech Series "Responding COVID-19 to Remove Barriers: Access, Equity, and Inclusion. Retrieved from https://www.aaou.org/webinar/
- AAOU. (2019). Quality Assurance Framework. Retrieved from http://aaou.upou.edu.ph/ quality-assurance-framework/
- Asian Productivity Organization APO. (2020). Quality Education under Crisis. Retrieved from https://youtu.be/VY7\_yGt7UEM.
- Belawati, T and Nizam. (2020). Potret Pendidikan Tinggi Pra COVID-19. Potret Pendidikan Tinggi di Masa Covid-10, Vol. 3-12.
- Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., Lambert, S. R., Al-Freih, M., Pete, J., Olcott, Jr., D. Rodes, V., Aranciaga, I., Bali, M., Alvarez, Jr., A. V., Roberts, J., Pazurek, A., Raffaghelli, J. E., Panagiotou, N., de Coëtlogon, P., Shahadu, S., Brown, M., Asino, T. I. Tumwesige, J., Ramírez Reyes, T., Barrios Ipenza, E., Ossiannilsson, E., Bond, M., Belhamel, K., Irvine, V., Sharma, R. C., Adam, T., Janssen, B., Sklyarova, T., Olcott, N. Ambrosino, A., Lazou, C., Mocquet, B., Mano, M., & Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, 15(1), 1-126. https://doi.org/10.5281/zenodo.3878572
- ConexED. (2020). Are online learning, virtual learning, e-learning, distance learning, and blended learning the same? Retrieved from https://www.conexed.com/are-online-learning-virtual-learning-e-learning-distance-learning-and-blended-learning-the-same/

- Devercelli, A. (2020). Supporting the youngest learners and their families in the COVID-19 (Coronavirus) response. World Bank. Retrieved from https://blogs.worldbank.org/education/supporting-youngest-learnersand-their-families-COVID-19-coronavirus-response
- Fadzil, D. M. (2020). OUM Way Forward: Transformative Online Pedagogies. Presented on the 1st AAOU President Speech Series Webinar at https://aaou.org/webinar
- Fullan, M. & Scott, G. (2014). New Pedagogies for Deep Learning. Retrieved at https://www.michaelfullan.ca/wp-content/uploads/2014/09/Education-Plus-A-Whitepaper-July-2014-1.pdf
- Global Innovation Index 2020. (2020). Retrieved at https://www.globalinnovationindex. org/Home
- Guido, R.M.D. (2014) Evaluation of a Modular Teaching Approach in Materials Science and Engineering. American Journal of Educational Research, vol. 2 (11), pp.1126-1130 DOI:10.12691/education-2-11-20
- Hertono, G.F. (2020). The Management of Online Learning. Presented on UT's 8th Knowledge Sharing Forum (KSF). Retrieved at https://sl.ut.ac.id/materiksf8
- Hootsuite. (2020). Digital 2020 Indonesia. Retrieved from https://andi.link/hootsuite-we-are-social-indonesian-digital-report-2020/International Council for Open and Distance Education ICDE. (2020).
- ICDE Quality Review Service. Retrieved from https://www.icde.org/knowledge-hub/quality-review-services
- Jakartapost.com. (2020). Cancellation of national exams won't affect graduation, enrollment: Nadiem. Retrieved from https://www.thejakartapost.com/news/2020/03/25/cancellation-of-national-exams-wont-affect-graduation-enrollment-nadiem.html
- Jakartapost.com. (2020). *Indonesia scraps national exams due to COVID-19*. Retrieved from https://www.thejakartapost.com/news/2020/03/24/indonesia-scraps-national-exams-due-to-COVID-19.html
- Jamal, U. (2020). What does the rise of online learning during COVID-19 mean for Southeast Asia? Retrieved from https://www.aseantoday.com/2020/08/what-does-the-rise-of-online-learning-during-COVID-19-mean-for-southeast-asia/
- Lau, J., Yang, B., & Dasgupta, R. (2020). Will the corona virus make online education go viral?
   Retrieved from https://www.timeshighereducation.com/features/will-coronavirus-make-online-education-go-viral.
- Li, K.C. (2020). Tutoring and mentoring during the COVID-19 Outbreak. Presented on the 2nd AAOU President Speech Series Webinar at https://aaou.org/webinar
- Market Research. (2020). Asia Pasific Learning management System Market Forecast 2019-2027).
   Rockville: Inkwood Research.
- Moeldoko. (2020). Transformation to digital society through online learning. Presented on UT's 7th Knowledge Sharing Forum (KSF). Retrieved at https://sl.ut.ac.id/materiksf7
- Ministry of Education and Culture. (2020). Structuring the Roadmap of Distance Learning. Kompas Talk with Universitas Terbuka. Retrieved from https://www.kompas.com/edu/read/2020/09/03/061421871/peta-jalan-pembelajaran-jarak-jauh-peluang-di-tengah-keterbatasan?page=all

- Nugrahanti, I. (2019). Freedom of Learning: A New Education System in Indonesia. Retrieved from https://atlascorps.org/freedom-of-learning-a-new-education-system-in-indonesia/
- Sareen, S. (2020). List of exams cancelled or postponed due to Coronavirus (COVID-19) Outbreak in India. Retrieved from https://www.collegedekho.com/news/list-of-exams-cancelled-postponedcoronavirus-COVID-19-outbreak-in-india-18994/
- Sharma, Y., Leung, M., & Chung, A. (2020). *Virus-related closures disrupt university entrance exams*. Retrieved from https://www.universityworldnews.com/post.php?story=20200227071915884
- Statista. (2020). Countries with the biggest share of internet users in Asia as of may 2020, by country. Retrieved from https://www.statista.com/statistics/272358/distribution-of-internet-users-in-asia-pacific-by-country/
- Sugiyono. (2020). *Quality Assurance of Online Learning: an EQAA Perspectives*. Presented on UT's 8th Knowledge Sharing Forum (KSF). Retrieved at https://sl.ut.ac.id/materiksf9
- Teter, W. & Wang, L. (2020). COVID-19 and UNSECO: Monitoring the impact of people and places for relevant higher education. Retrieved from https://bangkok.unesco.org/content/ COVID-19-and-unesco-monitoring-impact-people-and-places-relevant-higher-education
- UNESCO. (2020). *Education: From disruption to recovery*. Retrieved from https://en.unesco.org/covid19/educationresponse
- Universitas Terbuka. (2019). UT Rector's Report 2019. Jakarta: Universitas Terbuka.
- Universitas Terbuka. (2020). *UT Held Series of Knowledge Sharing Forum (KSF)* 2020. Retrieved from https://www.ut.ac.id/en/news/2020/07/ut-held-series-knowledge-sharing-forum-2020.
- Yarrow, N. (2020). COVID-19 in East Asia: How the Region's Higher Education Systems are Addressing the Crisis to Adapt to the Future. Retrieved from https://blogs.worldbank.org/education/COVID-19-east-asia-how-regions-higher-education-systems-are-addressing-crisis-adapt

## **European Region**

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# Impact of COVID-19 pandemic in the growth of open, online, blended and flexible learning in the European region

This section concentrates on the European region. It reports on the scale of growth; perceived issue of quality; assessment and examination; reputation of open, online, blended and flexible learning in this area, its inclusivity in access concluding with some perspectives for the future.

#### Scale of Growth

Figure 1 shows the situation in Europe in relation to the schools and Higher Education Institutions (HEIs) closure from April 2020. This closure has inevitably impacted on the growth of online and blended delivery solutions for both HEIs and schools in Europe.In accordance with an ongoing online survey carried out by EUA - European Universities Associations, in April/May 2020, almost **90% of the European HEIs** have been required to modify their delivery mode to an online and/or blended approach due to the COVID-19 outbreak.

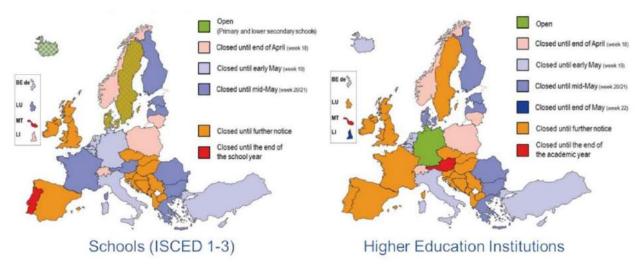


Figure 1- Schools and HEIs closing in April 2020- source EURYDICE (2020)

This situation has impacted over 1.5 billion students. In accordance with a UNESCO survey of national education systems undertaken in 61 countries it has been highlighted that governments around the world are making efforts to rapidly deliver distance education at scale in an attempt to ensure continuity of learning.

Between June 18th and September 4th, 2020, the European Commission has launched an Open Public Consultation (OPC) with the purpose of capturing the lessons learned from the COVID-19 crisis and ensuring a feasible and durable Action Plan for the upcoming future of Education.

The OPC was available on 'Have your say portal' (1) and collected respondents (population/sample of 2.716) "from 60 countries, with the top 10 countries being Romania (58.03%), Portugal (9.61%), Spain (4.82%), Belgium (4.16%), Italy (3.98%), Germany (3.65%), Bulgaria (2.03%), the Netherlands (1.33%), France (1.51%) and Greece (0.96%)" (2). Among others, the results of the OPC contributed to contextualising the extent of digital technologies used for education and training during the crisis. The majority (66.6%) of consulted groups reported that the use of distance and online learning had increased during the crisis (Figure 2) (3).

However, the scale of growth of online and blended online solutions vary across income groups countries. "90% of high-income countries/territories reported that they were using existing online learning platforms while only 53% from low and lower-middle income countries/territories are doing so. Insufficient Internet capacity is a concern for all education systems" (4).

Use of Distance and online learning before, during, and after the COVID-19 crises

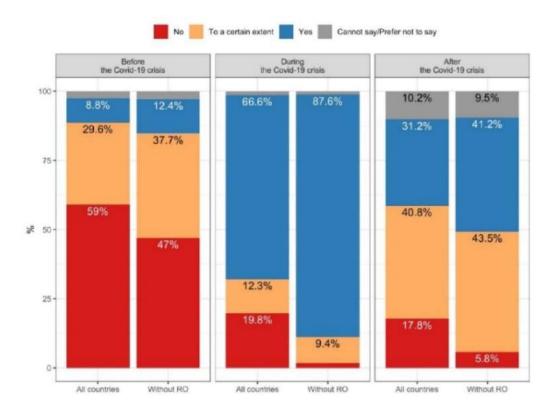


Figure 2- Source: Open public consultation on the new Digital Education Action Plan (2020) (5)

- (1) https://ec.europa.eu/info/law/better-regulation/have-your- say/initiatives/12453-Digital-Education-Action-Plan
- (2) https://ec.europa.eu/education/sites/education/files/document-library-docs/deap-swd-sept2020\_en.pdf
- (3) https://ec.europa.eu/info/law/better-regulation/have-your- say/initiatives/12453-Digital-Education-Action-Plan
- (4) https://eur-lex.europa.eu/legal-content/EN/TXT/?id=1602778451601&uri=CELEX%3A52020DC0624
- (5) 'Without RO' are the data representation made excluding the Romanian respondents that due to their large representation can false the data

#### **Perceived issues of Quality**

The perceived (and actual) quality of learning experienced by students, as well as teachers, across the European Member States during the pandemic varied in relation to "the availability of infrastructure and devices, the presence of digitally competent educators, including capacity to adapt pedagogical methods, and the existence or not of usable and accessible digital content, tools, services and platforms" (6).

Overall a lack of "innovative instructional approaches, which stimulate learner autonomy, motivation and engagement" were registered. As practice and research on the topic shows, high-quality and inclusive digital education requires time, skills and appropriate resources for planning and design, all prerequisites not matched at the beginning of the pandemic. Despite the emergency situation, HEIs performed slightly better compared to schools because of their prior experience in "providing blended learning options and online digital content in their courses and programmes. In most cases, their lessons continued virtually through streaming and use of existing learning management systems but this happened with a wide degree of quality regarding the learning design. On the other hand, schools and VET providers had to pivot rapidly, under similarly difficult circumstances and in most cases for the first time, to remote emergency education. In this rushed and unplanned situation, the production of new online learning content was rarely an option, especially because of time constraints. Most educators and students were confined in their homes at short notice and, as long as they had internet access and digital devices, in most cases a synchronous technology-mediated virtual classroom was considered the most practical and feasible approach" (7). The results of a School Education Gateway survey (8) confirmed what was detailed above: for the majority of teachers in school (66.9% of 4,859 respondents), their first experience with online learning was during the COVID-19 pandemic. To make the quality of online education more challenging, many of them also reported problems in accessing technology (computers, software, reliable internet connection, etc.) (9).

Due to the time constraints many educators belonging from traditional universities and schools have just 'replaced face to face teaching and learning with synchronous online classes'. As a consequence at the beginning of the academic year 2020/2021 in many European countries students have protested for the right to access to quality education (10).

#### Assessment and examinations

Due to the COVID-19 outbreak, and the closure of schools and universities buildings, it was needed to be found viable alternatives to on-site exams.

- 6) https://ec.europa.eu/education/sites/education/files/document-library-docs/deap-swd-sept2020\_en.pdf
- (7) https://ec.europa.eu/education/sites/education/files/document-library-docs/deap-swd-sept2020\_en.pdf
- (8) https://www.schooleducationgateway.eu/en/pub/viewpoints/surveys/survey-on-online-teaching.htm conducted between 9 April and 10 May 2020, with 4,859 respondents from more than 40 countries (of whom 86% were teachers or school heads)
- (9) https://publications.jrc.ec.europa.eu/repository/bitstream/JRC121071/jrc121071.pdf
- $(10) \ https://www.dutchnews.nl/news/2020/09/students-take-protest-against-online-education-to-the-museumplein-on-friday/$



"This has raised many issues about how to ensure that different assessment methods can be introduced in ways that assess students fairly, without detriment to their performance. Universities have tried to embrace these changes as quickly as they could, without sacrificing quality and fairness for speed of implementation" (11). Issues related to assessment and examination have affected also Erasmus students, who like the doctoral candidates have seen moved online examinations and thesis defense (12). Referring to the UNESCO working document released in April 2020 (13) it is possible to present a more accurate picture of the coping strategies adopted by the European countries in relation to examination and assessment. Despite the fact that Europe on March 14th, 2020 was declared by WHO (World Health Organization) the epicentre of the COVID-19 pandemic, several European countries decided to **continue holding the exams on the dates originally set**. Among these Germany, Finland, Hungary, France (14), Luxembourg, Poland and Slovenia (15).

The strategy to **cancel exams** at the beginning of the pandemic was followed by Ireland, France, Norway, the Netherlands, Sweden, United Kingdom and Slovakia. The latest cancelled for the academic year 2019/2020 the written part of the school-leaving examination (State Matura) as well as the written test by the 15-year-olds, "Test-9". Similarly, Sweden cancelled the SweSAT (Swedish Scholastic Aptitude Test- högskoleprovet), with consequences for the admittance to various HEIs and university programs. Also, the United Kingdom cancelled the school exams including the General Certificate of Secondary Education (GCSEs).

Using **continuous assessment** as alternative to final exams, has been an approach preferred by Norway, France and, by the Netherlands where both the exams at the end of the primary school (to access the second) and at the end of the secondary were cancelled, taking decision on the students performance in accordance to the grades collected during the year.

Many exams were **rescheduled** by the end of May/ beginning of the summer for Estonia (the upper secondary final school exams); Germany (the Abiturm, the German Baccalaureate); Bulgaria; France (the written tests for national competitions); Greece, (the exams to access universities); Ireland (the Leaving Certificate, the terminal exam for post-primary education); Latvia (foreign language examinations for 12th grade); Lithuania (graduation exams); Malta (A-level exams); the Netherlands, (enrol in higher education, for special cases); Spain (the official examinations to access university); Slovakia, (the oral part of the school-leaving examination; the final post-secondary examinations and the graduation examinations); Estonia, Finland and Turkey (high-stakes exams) (16).

- (11) https://www.the-guild.eu/news/2020/impact-of-COVID-19-for-university-students.html
- (12) https://eacea.ec.europa.eu/sites/eacea-
- site/files/brochure surveyreporterasmusmundusprogrammecovid19 03.pdf
- (13) https://en.unesco.org/sites/default/files/unesco\_review\_of\_high-stakes\_exams\_and\_assessments\_during\_COVID-19\_en.pdf
- (14) Specifically the national teacher recruitment
- (15) https://en.unesco.org/sites/default/files/unesco\_review\_of\_high-stakes\_exams\_and\_assessments\_during\_COVID-19\_en.pdf
- (16) IBID



Online modality for high- stake exams was the option for United Kingdom (Oxford and Cambridge moved the summer exams online); Belgium- the Wallonia and Brussels regions; Estonia and Italy (here each university decided the modalities for exams and final degrees for their own students) (17). Apart from high-stake exams, the online modality was chosen also in Finland, Germany, Hungary, Latvia, Lithuania, the Netherlands, Sweden, and Spain (18).

Whether specific examinations were "maintained, postponed, rescheduled on-site or transferred on-line, or whether they were cancelled and replaced by alternative modalities of continuous assessment or alternative approaches to exams and validation of learning, decisions must be driven by concern for fairness, equity and inclusion" (19). In this sense continuous assessment appears to be relevant choice and according to UNESCO it should be encouraged, "with measures to mitigate the risks of inequalities, for example by considering additional measures to offset bias from teachers in grading (e.g. make students work anonymous online, peer grading), and to support teachers, supervisors, invigilators to conduct exams in an unconventional way (e.g. organize exam boards or a jury online, make reference to and recognize student learning in previous years/semesters, etc.)"(20).

#### Reputation of open, online, blended and flexible learning

The responses from the Open Public Consultation (OPC) group, launched by the EU Commission this year, enable to highlight the reactions to the strategies adopted by several EU countries. These reactions show that many of the stakeholders involved, mainly: learners; educators, training staff, parents, HE and training institutions, private sectors and digital technology providers and public authorities, were not satisfied. As a consequence, the mismatching between the population needs and the solutions provided (see Table 1) have given open, online, blended and flexible learning a bad reputation.

Table 1: Top three unsatisfied needs during the COVID-19 crisis per respondent category (population/sample size 2.716) (21)

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(18) More details available here: https://en.unesco.org/sites/default/files/unesco\_review\_of\_high-stakes\_exams\_and\_assessments\_during\_COVID-19\_en.pdf

(19) IBID

(20) IBID

(21) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0624&from=EN



Target group	Most unsatisfied needs	Other unsatisfied needs								
Learners	Regular interaction and clear instruction by educators (53.3%).	Regular communication with other learners (40.1%); Regular and clear communication from the management of the education institution (35.5%) Support for mental health (33.6%)								
Educators	High-speed and stable connection at home (38.4%).	Training and guidance to adapt the class material and the teaching methodology to distance and online learning (36.1%); More regular clear communication, guidance and support from public authorities and lack of digital devices suitable for distance and online learning (34.3% each).								
Education and training staff	Lack of a high speed and stable internet connection at home for learners and teachers (44.4%).	Lack of digital devices suitable for distance and online learning (33.8%); Financial support at national or regional level (33.1%).								
Parents	More regular interaction, instruction and guidance from teachers/trainers/educators (57.4%).	More regular and clear communication, guidance and support from the educational institutions of their child(ren) (45.6%);     Easy to use platforms (32%).								
Education and training institutions	Lack of digital devices suitable for distance and online learning (58.2%).	High speed and stable internet connection (49.5%);     Guidance how to support the mental health and well-being of staff and learners (38.6%).								
Private sector and digital technology providers	More cooperation with public authorities during the COVID-19 crisis (47.7%)	More cooperation with education and training institutions (31.8%);     Opportunities to scale existing business (29.5%).								
Public authorities	Financial support to address the immediate challenges of the COVID-19 crisis (36.4%)	Easy to use platforms, digital devices that can be used for online and distance learning and high-speed and stable internet connection (27.3% each).								

Source: Open public consultation on the new Digital Education Action Plan (2020 (22))

As highlighted in the previous section, for many teachers at schools the first experience of online teaching was matureted during the COVID-19 pandemic. As a consequence, to this 'ergency online teaching and learning' many students as well as educators felt overlad demotivated and developed a wrong idea about online/distance teaching. However, as underlined by Hodges C. et al (2020) (23), there is a big difference between what students, and teachers, have experienced during the COVID-19 pandemic and the actual online education. The authors use the term emergency remote teaching to to underline this distinction.

(22) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0624&from=EN (23) https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning



Online as well as blended education require planning, time, training of the educators, resources available at institutional and policy levels and much more. Many resources have been made available online to help teachers/educators in this emergency time, example in this sense can be found here: https://ec.europa.eu/education/resources-and-tools/coronavirus-online-learning-resources\_en and https://empower.eadtu.eu/coronacrisis . Moreover frameworks for the development and evaluation of Blended education have been developed such as the European Maturity Model for Blended Education, available as open source here: https://embed.eadtu.eu

#### Access and inclusion

The sudden and large-scale shift to distance and online learning during the COVID-19 outbreak has been far from simple. Despite being a positive experience for some institutions with high levels of digital capacity, it raised significant challenges in terms of equity and quality. According to the data collected (24) it is expected that COVID -19 will negatively impact on students' learning, see Figure 3, due to four main factors.

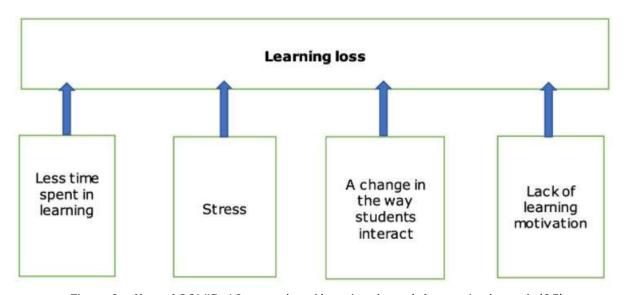


Figure 3- effect of COVID-19 on students' learning through four main channels (25)

"First, there is evidence showing that quarantined students tend to spend less time in learning compared to when schools are open. Second, many students confined at home due to COVID-19 may feel stressed and anxious, and this may negatively affect their ability to concentrate on schoolwork. Third, physical school closure causes a lack of in-person contact, which may, fourth, impact students' motivation to engage in learning activities" (26).

- (24) https://publications.jrc.ec.europa.eu/repository/bitstream/JRC121071/jrc121071.pdf
- (25) Figure from https://publications.jrc.ec.europa.eu/repository/bitstream/JRC121071/jrc121071.pdf page 28
- (26) https://publications.jrc.ec.europa.eu/repository/bitstream/JRC121071/jrc121071.pdf
- (27) https://www.oecd.org



Figure 4 and 5, which are based on OECD (27) data, show, respectively, what percentage of the 15-year-old surveyed students have a quiet place to study and a computer for accessing education from home.

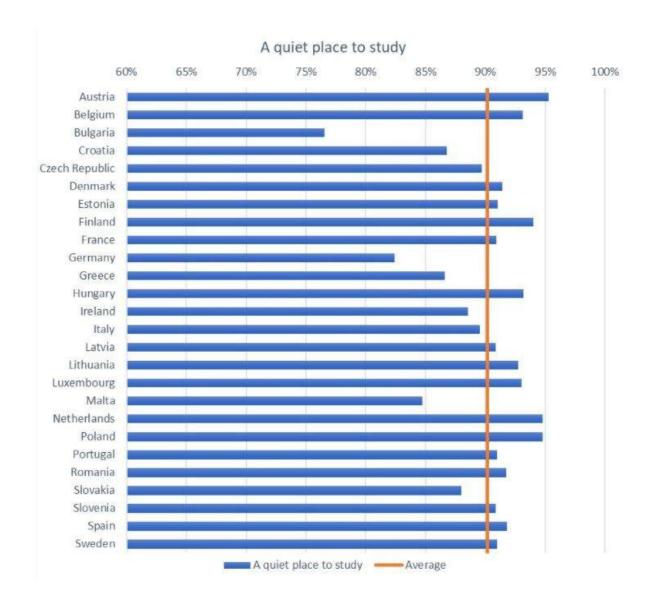


Figure 4- percentage of students divided per country that have reported to access to a quiet place to study (28)

(28) Figure from https://www.europeandataportal.eu/en/impact-studies/COVID-19/education-during-COVID-19-moving-towards-e-learning

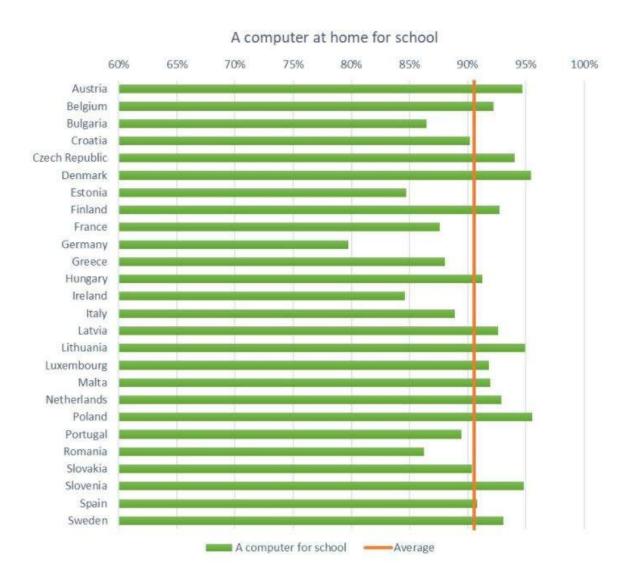


Figure 5- percentage of students divided per country that have reported to have a computer at home to study (29)

Students belonging to less advantaged families, who are less likely to have access to relevant digital learning resources (e.g. laptop/computer, internet connection); a suitable home learning environment and parental support (e.g.in homework management), are most likely to have worse learning/academic performance. COVID-19 has enhanced the effects of socio-economic inequities on learning, see Figure 6.

 $(29) Figure from \ https://www.europeandataportal.eu/en/impact-studies/COVID-19/education-during-COVID-19-moving-towards-e-learning$ 



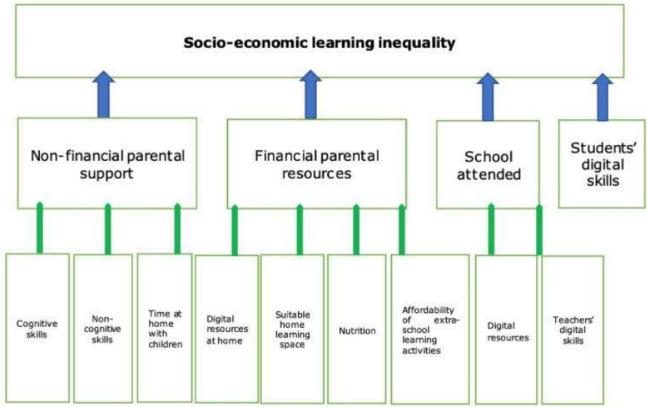


Figure 6- Inequity on socio-economic level in learning- European Area (30)

Digital inequalities for both students and learners are also the cause of disparities. Before COVID-19 very few (30%) of the teachers population interviewed has declared to feel 'well or very well prepared to use digital technologies for teaching' (31). Investments on teachers' digital skills development are thus essential for the implementation of the future European digital plan for education.

#### Acceleration of digital transition

The COVID-19 pandemic highlighted the importance of digital connections on many levels (smartworking, teleworking, online education and remote emergency teaching, etc.). In her speech the current executive vice- president on the digital package Margrethe Vestager (32) (sept 2020) presented the review of digital agenda with two proposals: "The first proposal is a new regulation for the European High Performance Computing Joint Undertaking. The second proposal is a recommendation for Member States to boost investment in connectivity infrastructure" (33). She proposed to invest 20% of the Recovery Fund in digital transformation. She concluded with the "hope that many member States will invest in digital skills. Over 40% of Europeans do not even have basic digital skills today. If we want everybody to benefit from the advantages of digital education, if we want to use digital applications in our daily lives, we need to create these skills.

- (30) Figure from https://publications.jrc.ec.europa.eu/repository/bitstream/JRC121071/jrc121071.pdf page 29
- (31) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0624&from=EN page 34
- (32) https://ec.europa.eu/commission/presscorner/detail/en/speech\_20\_1704
- (33) IBID.

If we want to lead in digital technologies, we have to step up investments in advanced digital knowledge and well-trained digital innovators" (34).

# The Assessment of new perspectives on Quality for open, online and flexible learning in Europe for the future

A dialogue on innovation and quality assurance between institutions, quality assurance agencies and governments should be organized. This dialogue should support the development of new perspectives on quality open online and flexible education for the future, leading to concerted actions towards innovation and quality in online education. The stakeholders mentioned should act in the following direction:

Institutions: developing and implementing policies and strategies for digital education in blended degrees and extended continuation of education provisions, an internal quality framework with a maturity model for online/blended learning and for continuous and open education.

Quality assurance agencies: adapting and fine-tuning criteria/indicators and presenting guidelines for innovation and digital modes of teaching and learning, and sharing good practices of internal and external quality assurance.

Governments: developing drivers for innovation and quality, and reviewing regulatory frameworks and practices for quality assurance and accreditation in online higher education, encouraging and accelerating innovation. A vision for change should be expressed through national strategies.

Key figure in the development of new perspectives for quality open, online and flexible learning is the teacher/educator who needs to be trained not only on digital technologies but also on innovative pedagogical approaches that can be suitable for the actual emergency situation and the future. Three pedagogical approaches and methodologies are suitable in this sense, and are online, blended and synchronous-hybrid education. They are suitable to manage teaching during a total lock-down scenario (online), partial (blended and hybrid), and also post pandemic.

- Synchronous hybrid learning: based on settings that have in common that both on-site or 'here' students and remote or 'there' students are simultaneously included;
- Blended learning: based on a course design with a deliberate combination of online and offline learning activities;
- Online distance learning: based on a course design with a continuous physical separation between teacher and learner, synchronously and asynchronously.

To be taken under consideration for a successful strategy is the *students'* voice, perspective and - readiness for digital learning, which refers to the preparedness for digital education when starting digital courses.

(34) https://ec.europa.eu/commission/presscorner/detail/en/speech 20 1704



The EU Commission, in September 2020 have drafted the renewed Digital Education Action Plan (DEAP) requiring reinforced coordination and collaboration actions at the EU level in order to:

- "Promote digital education as a strategic EU policy response to the COVID-19 crisis and to transform Europe's education and training systems in a lifelong learning perspective for the digital age;
- Share knowledge, good practices and experience across the education and training sectors, and amongst the diverse stakeholders in the digital education ecosystem, in order to cross- fertilise, exploit synergies and encourage new collaboration and partnerships;
- Address key issues that would benefit from reflection and action across levels and sectors of education and training and on the basis of a common European approach (e.g. Al in education, quality of online content, ethical use of big data, etc.);
- Analyse data, monitor results, report on progress and offer strategic foresight and research on digital education in order to feed policy making, strategies and decisions at regional, national and EU level;
- Experiment with new and innovative co-creation methods, support agile development and trials, and ensure early involvement of educators and learners with innovative learning tools, practices and processes;
- Provide easy access to European online learning tools, content and learning support that is
  multilingual, of high quality and respectful of European values, legislation and standards, for
  instance, regarding accessibility and equity, data use and protection, privacy and ethics" (35).

A consequence of the DEAP is the availability of dedicated funding programmes that will facilitate the study/assessment, design and implementation of new perspectives for quality open, online flexible education.

EADTU the European Association of Distance Teaching Universities is very active in the field of Open, Online flexible education via many services (i.e. EMPOWER and the e-xellence) and via EU funded projects, such as EMC-LM; E-SLP; EMBED, which aim at providing resources and strategies/guidelines to lifelong learners and policy makers in the frame of continuous education and continuous professional development, as well as to the need of knowledge exchange among experts (EMPOWER) and students (OpenVM; http://virtualmobility.eadtu.eu/). Through these projects and activities, EADTU contributes to solutions for challenges faced in the context of the current COVID crisis, and supports innovation in education in general.

(35) https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0624&from=EN page 58

## **Latin American Region**

#### Mary Morocho Quezada

AIESAD (Iberoamericain Association of Higher Distance Education) and CALED (Latin American and Caribbean Institute for Quality in Higher Distance Education), Ecuador

# Impact of COVID-19 pandemic in the growth of open, online, blended and flexible learning in the Latin American region

Coronavirus has made a significant impact on education. According to UNESCO, as of April 2020, it was determined that 192 countries had closed schools and universities over their entire territory, impacting over 91.4% of the world's student population, i.e., 1.576 billion students and some 60.2 million teachers. For Latin America, it is considered that some 24 million university students and nearly 1.4 million teachers have been directly affected by closing institutions, further deepening the educational inequalities evident before the pandemic.

The main rapid response by educational establishments to avoid interrupting their academic cycles and interfering in the teaching process has been to apply distance education programs based on on-line learning platforms, achieving continuous learning, and guaranteeing inclusion and equity with adequate digital instructional resources.

Relevantly, many educational institutions – above all higher, university level, even for in-classroom teaching – already had virtual platforms, as did some non-university centers. In these cases, the forced move toward distance digital education has been gentler, depending on the use that teachers and students have been able to make of that platform so far (García-Aretio, 2020).

However, it would seem that, in general, the change in modality has not been very positively received, because part of the dislike for distance learning comes from the fact that the contents offered were never designed for a distance education higher education course, but are simply attempting to fill in for in-classroom classes with virtual lessons not well prepared beforehand (IESALC UNESCO, 2020).

So, this report will include the impacts caused by the pandemic on higher education in the Latin America and Caribbean region, to determine the stakeholders affected and define the guidelines required to guarantee quality in continuing to educate using the new study modality. We will also set forth the actions taken by governmental entities that have specific jurisdiction over policies that guarantee the right to higher education during the health emergency.

#### Scale of Growth

Based on the main response taken by HEIs to achieve continuity of learning, it should be emphasised that they did not adopt a new definitive study modality in their educational model, but rather made an emerging adjustment to face the consequences of the COVID 19 pandemic, where technology plays a relevant role in the development of the teaching-learning process. Thus, in the face of this adjustment, distance and virtual education shows a significant trend towards accelerated growth.

To date, there are no official statistics on the real growth of distance education in Latin America and the Caribbean because of the pandemic, making it impossible to present data that show the use of this mode of study; therefore, inferentially, given the governmental and institutional measures taken for higher education, specifically, to teach classes virtually, it can be concluded that distance education has grown significantly.

It is pertinent to refer to the Report on the Impact of COVID-19 on Higher Education in the world, carried out by the International Association of Universities (IAU), based on the IAU Global Survey that received 576 responses from 424 universities and other higher education institutions based in 109 countries and two administrative regions of China (Hong Kong and Macao), which found that 72% of HEIs in the Americas replaced face-to-face teaching with distance learning, 22% suspended classes by implementing some solutions, 3% were not affected and 3% suspended classes.

Undoubtedly, these results show that the vast majority of HEIs have opted for distance learning, reflecting the momentum towards distance education. It should be noted that a relatively small number of countries monitor the actual extent and use of distance and e-learning. However, projections show variable coverage: in high-income countries distance education reaches 80-85 %, while the figure drops to less than 50 % in low-income countries. This deficit can largely be attributed to the digital divide, as disadvantaged populations have limited access to basic household services, such as electricity; a lack of technological infrastructure; and low levels of digital literacy among students, parents and teachers (United Nations, 2020).

#### **Perceived issues of Quality**

The immediate response to choosing virtual classes to carry on with the educational process, because of mandatory confinement to cope with the pandemic, was an abrupt change for all staff involved; despite all stakeholders' diverse limitations, they have been making an effort, learning as they go, and getting used to the new study modality.

Of course, the higher education institutions (HEIs) that already had experience in virtual education have found it simpler to adjust certain courses, but those offering primarily on-site studies and even courses with major elements of experimentation have been seriously complicated and have had to take action in minimum time – some say record time – trying to program and provide the necessary tools for quality teaching in terms of methodology and the use of technology, but above all, seeking to include students by addressing their digital divides and lack of familiarity with educational platforms.

For this reason, real impacts were evidently generated on the educational system different stakeholders.

#### • HEIs

The impact caused by temporarily closing HEIs' on-campus activities depended on their capacity to continue with academic activities and support their financial sustainability. For HEIs that were familiar with virtual education, this change has proven manageable, but those with a solely in-classroom modality have faced a major challenge regarding their change in teaching modality and their financial capacity.

There is also the paradox that, even in countries that already had a regulatory framework favoring virtual higher education and where HEIs have been able to build their own capacities in this field and, therefore, were better able to transfer them to the classroom-based programs that can now continue only in the virtual modality, not all disciplines or programs are equally easy for the required technology and instructional transfer. The most alarming case is the subsector of technical and vocational higher education, which often depends on instruments and laboratories to train their students (IESALC UNESCO, 2020).

In general, notable efforts have been made, despite their lack of experience, moving from technical and technological infrastructure for a small number of virtual courses, to meeting the technical and technological needs for giving all their courses to all their students – in such a short time – and are worthy of recognition for this hard work. However, their job does not end with transferring all their courses to the virtual modality; this modality change also entails financial difficulties, which could mean that cash flows fall short, generating treasury issues, and even jeopardizing financial survival, especially in the case of private HEIs, more so if they are small or medium, which could prevent them from providing on-line schooling and – in the worst-case scenario, lead to their closing.

#### Teachers

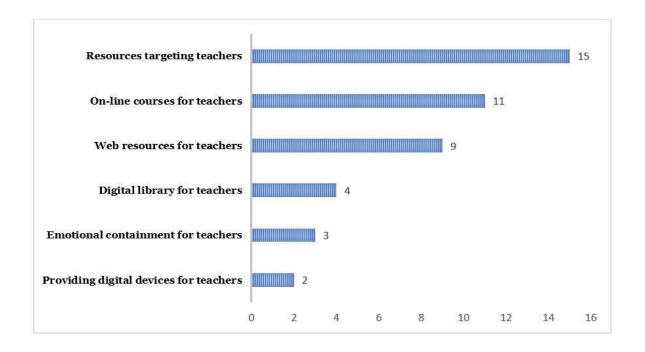
Teaching personnel is essential to develop virtual education, but it is relevant to consider whether teachers have education, training, and experience in this type of education so they will have no difficulties guaranteeing continued learning. Clearly, distance higher education does require efficient utilization of technology, which accordingly complements the teaching process. Undoubtedly, the health crisis has revealed that teachers do not have sufficient preparation to give virtual classes and guarantee quality teaching and learning; therefore, some HEIs have their faculty taking training courses to learn as they go, and others have taken the essential first step of preparing not only teachers but also students, to move to virtual learning

With all this entails in technological terms and competencies for digital teaching and learning, and only then to actually move to distance instruction.

However, in view of the almost immediate digital transformation that HEIs have undergone, there being no time to prepare suitable conditions, the faculty has been challenged to find creative, innovative solutions, acting and learning as they work, demonstrating their capacity for adaptability and flexibility in course contents and designs for learning in their different areas of training (IESALC UNESCO, 2020)..

The System of Information on Educational Trends in Latin America (SITEAL) of UNESCO's International Educational Planning Institute (IIPE) has systematically analyzed the responses made by educational systems in Latin America during the COVID-19 pandemic crisis, concluding that most of the countries considered (15 out of the total of 18)[1] have provided resources of varied kinds to teachers, concentrating on providing on-line courses and Web resources to teachers, and providing digital libraries, training on emotional containment, and distributing digital devices.

Figure 1. Governmental initiatives to support teachers under the pandemic, by types of assistance



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on the System of Information on Educational Trends in Latin America (SITEAL), "Systematic summary of responses by educational systems in Latin America to the COVID-19 crisis", 2020 [on-line] https://www.siteal.iiep.unesco.org/respuestas\_educativas\_covid\_19.

Another impact on teaching staff is that some HEIs have no strategies for continuing their activity when on-site classes end, and have threatened staff with the possibility that temporary contracts could be terminated.

#### Students

Although most university students are familiar with using technology, there is also a clear differentiation between students who use ICTs in this learning process and those who do not. Virtual education has to adapt to the temporary ending of on-site activities in HEIs due to the pandemic. The unquestionable impacts generated in students include difficulty in using the educational platform and their lack of digital skills. However, the greatest concern of governments and institutional authorities is students' technological inequality, which could undermine their continuity in learning.

Brazil is the country with the largest university population affected by closing classrooms in the Ibero-American region, followed by Mexico and Argentina; while Uruguay has the lowest number of students affected, as shown in Figure 2.

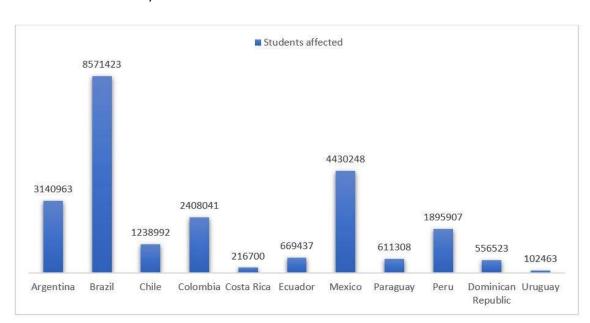


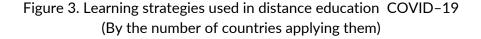
Figure 2. Students affected by countries

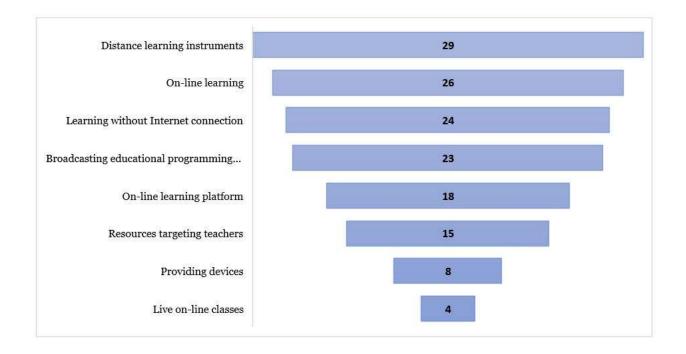
Source: OEI. (2020). Report on Effects of Coronavirus on Education.

#### Teaching-Learning Model

To attempt to ensure instructional continuity, it was decided to implement emergency distance education, considering that all the capacities and resources of standard higher education could not be expected. Conceiving such a solution has shown that teaching and learning require competencies in digital environments and in distance education, for both teachers and students. This has generated Corona – teaching, understood as transforming physical classes to a virtual modality, but without making any changes in the methodology. Further, the non-existent instructional and digital competencies of teachers and students are accompanied with significantly low student self-regulation and discipline; overall, this is indispensable to overcome for the success and quality of a distance program.

The COVID-19 Report by the Economic Commission for Latin America and the Caribbean (ECLAC) and United Nations Education, Science and Culture Organization (UNESCO) shows that 23 of the 29[2] countries analyzed have developed on-line learning through strategies using television and radio. Other learning strategies used to give distance education during the pandemic are reflected in the following figure.





Source: Economic Commission for Latin America and the Caribbean (ECLAC)/United Nations Education, Science and Culture Organization (UNESCO), "Education in the time of the COVID-19 pandemic", COVID-19 Report, Santiago, 20 August 2020.

Even in the case of countries that had standards in place for virtual education and some HEIs with extensive experience in this study modality, to transfer in-classroom classes to virtual mode, not all courses of study readily admitted the required instructional and technological transfer. This has become a concern in technical and biological area studies, requiring virtual and remote instruments and laboratories to achieve adequate learning results.

#### Assessment and examination

Another worrisome aspect in the teaching and learning process has been to prepare and implement a secure system of in-presence testing, but "virtual", considering that evaluation is a process that makes it possible to determine students' performance and verify that the proposed learning outcomes have been met. Despite efforts to define an adequate, practical method, for the purpose of reducing possible fraud by students, there are impediments such as connectivity and access to online platforms, leading HEIs to postpone, mainly, their entry exams and professional qualification examinations. And in the case of formative evaluations for each course, to avoid repetition and to project continuity and educational recovery for following years, evaluations were cancelled or postponed, or alternative approaches and methodologies have been considered to examine and validate each individual student's learning.

#### Reputation of open, online, blended and flexible learning

The Latin American and Caribbean region has limited empirical evidence on the perception of the actors in the educational process regarding the change of study modality due to the health crisis caused by COVID-19.

Thus, in general, it can be determined that although students adapted very quickly to virtual classes, they have developed a different, mistaken and very distant conception of what distance and virtual education really is due to the overload in their academic activities,

demotivation and abandonment on the part of teachers. With regard to the teachers, although their adaptation process was complicated due to the lack of preparation in the teaching-learning methodology and the absence of digital skills, with the passage of time they managed to play their role in a responsible and fruitful way, reinforced by the new knowledge acquired thanks to the education and training received to provide quality teaching.

The vast majority of HEIs consider that being part of the change and knowing the benefits of distance education is an opportunity to rethink education and transform the educational model towards a quality teaching and learning process based on the use of new technologies. The efforts made to deal with the impacts on the education system in a short period of time show that it is possible to adapt quickly to new situations and that the transition is possible, thus making it possible for the actors to learn about the benefits of virtual classes and change their perception.

#### Access and inclusion

Technology contributes significantly to the educational process, enabling students to continue receiving their classes at the same time, through HEIs' own virtual learning environment, to keep from interrupting their studies. The role of HEIs in digital transformation has not been easy, especially for those that did not have virtual learning environments or had them but only with minimal capacities; undoubtedly, they have made significant efforts, since even in less time than a week they have had to generate suitable technical and technological infrastructure to give all their courses in the virtual modality for all students.

It is relevant to state that, although schools closed temporarily, this caused social and economic difficulties, especially for less-favored students because of unequal access to technologies and Internet connection, as well as the difference in digital skills among teachers and students.

In Latin America and the Caribbean, connectivity differences between the urban and rural zone are significant; specifically, 67% of urban households are connected to the Internet, versus only 23% in rural zones. It can also be stressed that over 90% of rural homes in Bolivia, El Salvador, Paraguay and Peru do not have Internet connection; even in countries with better conditions, such as Chile, Costa Rica and Uruguay, only 50% of rural homes are able to connect.

Low connection speeds consolidate situations of exclusion by preventing on-line education in practice. So, by June 2020, in 44% of the region's countries adequate download speed has not been achieved, enabling on-line activities to be conducted simultaneously. On the basis of the Federal Communications Commission (FCC) Bandwidth Speed Guide, the following functions are established by download speed:

- **Low** <18.5 Mbp/s, enables functions such as email, basic video, and direct transmission of audio and video through Internet (streaming) but does not enable on-line education.
- Medium > 18.5 Mbp/s, makes it possible to conduct two basic functions at once and one highdemand on-line activity. It also enables telecommuting and non-simultaneous on-line education.
- **High** > 25 Mbp/s, enables basic functions simultaneously and high-demand functions, as well as telecommuting and simultaneous on-line education.

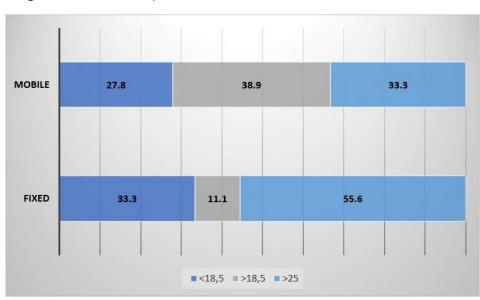


Figure 4. Download speeds of mobile and fixed broadband, June 2020

Source: Economic Commission for Latin America and the Caribbean (ECLAC), Regional Broadband Observatory (ORBA), based on Ookla, "Speedtest Global Index" [on-line] http://www.speedtest.net/global-index

The number of educational applications downloaded per inhabitant can be examined, showing how adopting apps reflect students' ability to supply for their education, to cope with their conditions of isolation and continue with their virtual educational process.

Table 1. Use of educational applications, 2020

Country	Indicator					
Argentina	52.62					
Bolivia	7.11					
Brazil	65.22					
Chile	87.35					
Colombia	50.73					
Costa Rica						
Ecuador	9.09					
Mexico	48.19					
Peru	52.35					

Source: AppAnnie, taken from CAF (2020)

Undoubtedly, digital inequality has been one of the main problems visible in times of COVID-19, generating national and regional tension in public policy and specific, necessary regulation; therefore, it has been indispensable for relevant authorities to promote investment, coverage, convergence, and providing of new services to improve digital infrastructure. Government action, in most Latin American and Caribbean countries, goes along with regulating effective provision of Internet service, through installation, maintenance, and operation; for the purpose of ensuring adequate operation of remote activities.

#### **Acceleration of Digital transition**

Virtual education is a genuine challenge taken up by educational establishments to confront the reality of our lives, and despite governmental efforts to massify connectivity and accessibility to devices that would enable teachers and students to learn digital skills, and rapidly accelerate during the COVID 19 pandemic, when Latin American and Caribbean countries are unequally prepared to address this crisis through digitalization because digital divides exist and persist. Therefore, it is essential, first of all, to strengthen access to technology for the least-favored population groups, enabling them to access the Internet with enough browsing power to participate in educational activities, to succeed in continuing and completing their university studies, without neglecting instructional and management aspects.

Undoubtedly, the pandemic has accelerated, irreversibly and almost immediately, the digital transition toward a future model of education integrating technology to achieve personalized learning, while demonstrating that educational quality will not be affected, which will clearly require proper management of academic and administrative areas, the necessary pedagogical preparation, technological capacity, and adequate teaching methodology for that study modality. Learning and being forced to use digital tools will lead teachers and students to discover the bounties of virtual education.

In Latin American and Caribbean countries, governmental measures adopted in higher education, as a consequence of the emergency, coincide in implementing distance and virtual education, using digital platforms and resources, and virtual academic support. Actions that have been taken to virtualize and continue teaching and learning are shown in the following table.

Table 2. Measures for educational continuity

	ARGENTINA	BAHAMAS	BARBADOS	BELICE	BOLIVIA	BRASIL	CHILE	COLOMBIA	COSTA RICA	ECUADOR	EL SALVADOR	GUATEMALA	GUYANAS	HAITÍ	HONDURAS	JAMAICA	MEXICO	NICARAGUA	PANAMÁ	PARAGUAY	PERÚ	REP. DOM.	SURINAM	TRI. Y TOBAGO	URUGUAY	VENEZUELA
LEARNING PLATFORMS		X	х			x										x						X		x	X	
DIGITAL CONTENTS	X			X	X	X	X	χ	X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X
PHYSICAL MATERIAL OR SOCIAL NETWORKS	х	X					x		x	х	х	х	x		х	x			x	-	x	x				
TV OR RADIO	X		Х	Х		Х	X	X	X	X		Х	X	Х	X	X	X		X		X	X	X	X		X
OPENSCHOOLS																		X								

Source: IDB (2020) [on-line] https://publications.iadb.org/publications/spanish/document/La-educacion-en-tiempos-del-coronavirus-Los-sistemas-educativos-de-America-Latina-y-el-Caribe-ante-COVID-19.pdf

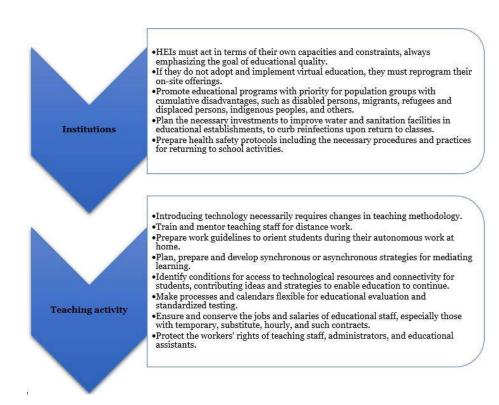
Countries had not planned to consolidate distance education, but in view of the emergency they made significant adjustments in their capacities in order to avoid leaving the educational sector without any support; in some countries, such as Argentina, Barbados, Belize, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Panama, Peru, Dominican Republic, Surinam, Trinidad and Tobago, and Venezuela, they have turned again to first-generation technology media (written press, radio, and television) to maintain educational continuity, in view of many households' Internet connectivity limitations.

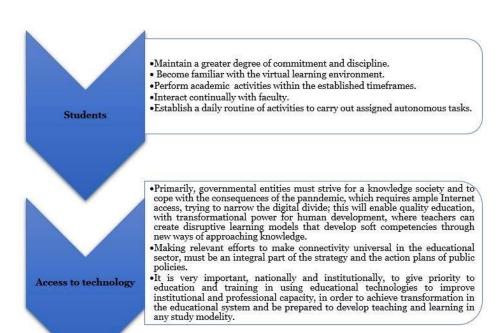
# The Assessment of new perspectives on Quality for open, online and flexible learning in Latin America and the Caribbean for the future

In the short and medium term, it is essential to know whether the measures adopted to cope with the pandemic in education achieved the planned learning outcomes, and if not, find the necessary corrective measures to make sure to reinforce contents and obtain planned results.

For that reason, as a function of each institution's own conditions and constraints, to ensure educational quality under equal opportunities and non-discrimination, we venture to establish some recommendations for the different stakeholders involved in teaching and learning to mitigate the impact of COVID-19.

Figure 5. Recommendations





Prepared by the Authors

#### New perspectives about quality for on-line learning

The health emergency has sparked a clear drive toward virtual education, as expressed by García-Aretio, and many of these advances in education will consolidate after the pandemic, because this learning will not be forgotten, and all the best parts will be integrated into former teaching habits. We may be facing a scenario of surprising educational innovations. Although there may also be the possibility of returning to normality, with on-site classes, without HEIs or their staff considering any benefit or opportunity in being involved in virtual education.

To address the existing digital divide in Latin America and the Caribbean, as a first step, we must generate, as a top-priority policy, universal Internet access in the educational sector, thereby guaranteeing technological infrastructure, connectivity infrastructure, and digital literacy, which will lead to each stakeholder's proper emergence in teaching and learning, and achieving digitally included individuals.

The pandemic will enable us to break down barriers and begin or give greater priority to using technology in education, which – when used properly – will yield customized, active learning, facilitating the development of new competencies and skills matching the needs of the globalized world we live in.

Jointly with working to reduce technological inequality, adequate instructional designs must be established, staffed with skilled professors to carry out quality virtual education, to meet the criteria, standards and indicators that ensure educational quality and equity, thanks to effective performance of HEIs' fundamental functions: teaching, research, and integration with society. It is also essential to have a national normative framework that can regulate distance and virtual education and its educational quality, enabling university management to incorporate and harmonize the instructional model to best educate students and make them competitive for the world of work.

Finally, we emphasize that, if virtual educational activities are well adjusted, the methodology and contents are suitable, and the faculty has adequate training, the results need not differ from the outcomes of on-site education and the quality may be clearly appreciated.

#### References:

- IIDB. (2020). La educación en tiempos del coronavirus: Los sistemas educativos de América Latina y el Caribe ante COVID-19. [Education in times of coronavirus: Education systems in Latin America and the Caribbean in the face of COVID-19] Retrieved from: https://publications.iadb.org/publications/spanish/document/La-educacion-en-tiempos-delcoronavirus-Los-sistemas-educativos-de-America-Latina-y-el-Caribe-ante-COVID-19.pdf
- CAF. (2020). El estado de la digitalización de América Latina frente a la pandemia del COVID-19. [The state of Latin America's digitisation in the face of the COVID-19 pandemic] Retrieved from: https://scioteca.caf.com/bitstream/handle/123456789/1540/El\_estado\_de\_la\_digitalizacion\_de\_ America\_Latina\_frente\_a\_la\_pandemia\_del\_COVID-19.pdf?sequence=1&isAllowed=y
- CAF CEPAL (ECLAC). (2020). Las Oportunidades de la Digitalización en América Latina frente al Covid-19. [The Opportunities of Digitalization in Latin America in the face of Covid-19] Retrieved from:https://scioteca.caf.com/bitstream/handle/123456789/1541/Las\_oportunidades\_de\_la\_digitalizacion\_en\_America\_Latina\_frente\_al\_Covid-19.pdf?sequence=1&isAllowed=y
- CEPAL (ECLAC) OREALC/UNESCO. (2020). La educación en tiempos de la pandemia de
- COVID-19. [Education in times of the COVID-19 pandemic] Retrieved from: https://repositorio.cepal.org/bitstream/handle/11362/45904/1/S2000510\_es.pdf
- García-Aretio, L. (2020). Coronavirus y EaD. No es bueno improvisar, pero hay que actuar. Contextos universitarios mediados. [Coronavirus and EaD. It is not good to improvise, but it is
- necessary to act. Mediated university contexts] (ISSN: 2340-552X). Retrieved from: https://aretio.hypotheses.org/3150.
- García-Aretio, L. (2020). LMS. Plataformas Virtuales o Entornos Virtuales de Aprendizaje. Ventajas y funcionalidades. Contextos universitarios mediados. [Virtual Platforms or Virtual Learning Environments. Advantages and functionalities. Mediated university contexts] (ISSN: 2340-552X). Retrieved from: https://aretio.hypotheses.org/3292.
- IESALC UNESCO (2020). COVID-19 y educación superior: De los efectos inmediatos al día después. [COVID-19 and higher education: From the immediate effects to the day after] Retrieved from: http://www.iesalc.unesco.org/wp-content/uploads/2020/04/COVID-19-060420-ES-2.pdf
- Marinoni, G., Van't Land, H., Jensen, T. (2020). THE IMPACT OF COVID-19 ON HIGHER EDUCATION AROUND THE WORLD. IAU Global Survey Report. Retrieved from: https://www.iau-aiu.net/IMG/pdf/iau\_covid19\_and\_he\_survey\_report\_final\_may\_2020.pdf
- Naciones Unidas. (2020). Informe de políticas: La educación durante la COVID-19 y después de ella. [Policy Brief: Education During and After COVID-19] Retrieved from: https://www.un.org/sites/un2.un.org/files/policy\_brief\_-\_education\_during\_covid-9\_and\_beyond\_spanish.pdf

- OEI. (2020). Informe Efectos del Coronavirus en la Educación. [Coronavirus Impact on Education Report] Retrieved from: https://www.oei.es/covid-19-educacion/educacion-panoramica
- OREALC UNESCO. (2020). Componentes para una respuesta integral del sector educativo de América Latina frente al COVID-19. [Components for a comprehensive Latin American education sector response to COVID-19] Retrieved from: https://es.unesco.org/fieldoffice/santiago/covid-19-education-alc
- Rama, C. (2020). A la búsqueda del tiempo perdido en educación virtual. [In search of lost time
  in virtual education] Retrieved from: https://www.republica.com.uy/a-la-busqueda-del-tiempoperdido-en-educacion-virtual-id759180/
- The Dialogue. (2020). La Educación Virtual en Tiempos del Covid-19: Seminario en honor de José María Antón. [Virtual Education in the Times of Covid-19: Seminar in Honour of José María Antón] Retrieved from: https://www.thedialogue.org/analysis/la-educacion-virtual-en-tiempos-del-covid-19-seminario-en-honor-de-jose-maria-anton/?lang=es
- The Dialogue. (2019). TRANSFORMANDO LA EXPERIENCIA DE APRENDIZAJE A TRAVÉS DEL USO DE LA TECNOLOGÍA EDUCATIVA: Desafíos y oportunidades en América Latina.
   [Transforming the Learning experience through the use of educational technology: Challenges and Opportunities in Latin America] Retrieved from: https://www.thedialogue.org/wp-content/uploads/2019/12/Transformaci%C3%B3n-Layout-1.pdf

#### Notes:

[1] The 18 Latin American countries considered in this systematic summary are: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Dominican Republic, Uruguay, and Venezuela.

[2] Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Granada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Santa Lucia, Surinam, Trinidad and Tobago, Uruguay, and Venezuela

## **North American Region**

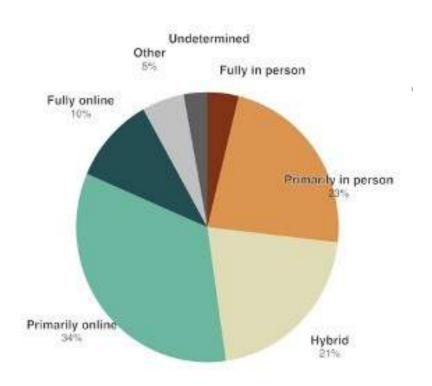
Dr. Yaping Gao Quality Matters, USA

# Impact of COVID-19 pandemic in the growth of open, online, blended and flexible learning in the North American region

#### **Scale of Growth**

Incremental growth in online learning (the number of fully and partly online students in North America) continued in 2019-2020, but the arrival of the COVID-19 pandemic in February triggered a pivot to remote learning peaking in mid-March, the middle of the Spring 2020 term, increasing the open, online, blended and flexible learning component to nearly 100% at both open 2-year community colleges and 4-year colleges and universities.

Primary Mode Of Instruction In U.S. 2-year And 4-year Institutions In Fall 2020



SOURCE: Davidson College and the Chronicle of Higher Education 10/29/2020

In Fall 2020, about 44% of U.S. 2-year and 4-year institutions committed to remote learning at the outset and did not deviate. An additional 20% were non-residential institutions that opted for blended or hybrid learning with some face-to-face but much more delivered remotely. However, 27% of U.S. institutions began the fall by returning to in-person, campus-based education, with modified calendars, social distancing precautions, and extensive reliance on blended or remote learning in most courses. Despite these steps, many in-person institutions experienced COVID outbreaks and were forced to convert to remote learning during the term for a period of weeks or the remainder of the term. In sum, 90% or more of Fall 2020 instruction was delivered in open, online, blended and flexible learning formats, and a similar pattern is emerging in plans for Spring 2021.

Canadian and Mexican schools exhibited the same general pattern for course delivery in Fall 2020. Canadian statistics reported by the Canadian Association of University Teachers show the breakdown of institutions as 17% online, 56% primarily online, 23% blended, and less than 3% fully or primarily in person. Comparable statistics for Mexico are not available at this time, but the Earnst and Young Parthenon Report in August 2020 noted the trend to continue with remote instruction into the fall.

What has gradually become clear, despite initial pessimism both within the higher education community and among other stakeholders, is that the majority of campus-based faculty adapted to digital learning, many discovering digital tools and online techniques which they had not used previously that contribute to effective learning experiences and engagement with students. In their commitment to continuing their educational mission and serving their students to the best of their ability, the majority of faculty members affected by the pivot felt that they had been successful in meeting their students' needs. Though difficult to measure with any precision, it is apparent that many of these faculty members plan to continue applying digital learning tools and techniques in their classes even after the pandemic recedes and face-to-face learning resumes. They constitute a substantial body of new digital learning users – far greater in number than the incremental growth we have seen, year-to-year, over the past two decades.

#### **Perceived Issues of Quality**

The exploding reliance on digital learning resulting from the pandemic has added new energy to a long-standing debate on the quality of online learning as compared to classroom-based learning. On the one hand, there has been a growing body of evidence that there is "no significant difference" in student outcomes between online and face-to-face learning. On the other side, critics have continued to argue that the online environment could not adequately replace the stimulus to learning of the inperson classroom.

The sudden exposure of half or more of the North American professoriate to at least the rudimentary tools and techniques of online learning during the pandemic has convinced many who were previously opposed to online learning that it has many attractive features and deserves a closer look. They have looked for benchmarks of quality and sought training in adopting proven quality standards in unprecedented numbers. The perspective of these primarily face-to-face instructors is emphasizing some issues of quality that have not been the highest priority in recent years. These include quality standards for academic integrity, synchronous online activity, and community building strategies, in addition to well-established course design, technology, and student engagement strategies.

Other quality issues given new urgency by the influx of campus-based faculty and students since Spring 2020 include the availability and sufficiency of faculty training and professional development for online teaching, the adequacy of student orientation and support for online study, and the availability of online course design assistance from a cadre of instructional designers and technologists. These services have been unavailable or at a minimal level at many institutions, barely able to keep up with incremental increases in demand, but now seen as quite inadequate to address the surge in numbers and need.

Since March 2020, quality assurance organizations, like Quality Matters (QM), have experienced growth in interest by higher education institutions in access to established quality standards, professional development for vast numbers of instructors new to remote/online teaching, and timely guidance on turning rapidly created remote courses into fully online courses consistent with quality standards. For example, QM has seen more than a 100% and still increasing demand for its quality assurance training beginning less than 2 months into the pandemic. It is too early to be certain, but the prospects are strong that this increased interest in adoption of quality standards and proven best practices across an expanded segment of higher education institutions will continue long after the pandemic has been overcome.

#### **Assessments/Examinations**

One of the perennial criticisms of distance education is the potential for academic dishonesty, based on the ease with which digital materials can be plagiarized and cheating can occur on unsupervised examinations. Digital databases have been created to detect plagiarism and, in the last decade, an industry of remote proctoring solutions has assumed major proportions. Today, confidence in the security of online assessments is limited only by the commitment and investment an institution is prepared to make in an array of tools and procedures for pre-examination student authentication, concurrent exam monitoring, and post exam validation.

Eduventures, a US-based research entity, has identified 22 different products called "Assessment Integrity Solutions" in its 2020 Higher Education Technology Landscape. Their analysis has found that about 1,300 institutions across all sectors of U.S. higher education are currently using 2,400 combinations of these implementations. However, a limited number of institutions have implemented the kind of thorough process illustrated below, due to the tremendous commitment and resources needed at the institutional level to implement and deploy a truly secure testing environment.

# Authentication Testing Environment Assurance Behavioral Review Testing Data Analysis Verify ID Biometrics Gov. Issued ID Student Email/Credentials Plagiarism Testing Data Analysis Monitor Usage Ctrl-C Ctrl-V Sessions Check for Plagiarism of Trends Data Data Check for Plagiarism Of Trends Data Data Data Dashboard After Test During Test After Test

Source: Eduventures Market Overview: Assessment Integrity Solutions

Concerns about academic dishonesty appear even greater among recent converts to online instruction in the pivot to remote learning in Spring 2020. Without ready solutions at hand to address these academic integrity issues, many institutions initially implemented pass-fail grading during the spring term.

By Fall 2020, most institutions had returned to traditional grading and adopted some of the strategies described above to ensure academic integrity. While technology-based solutions for proctored testing are available to rethink and redesign assessments for the digital environment with active learning and engagement strategies as well as competency- and evidence-based learning. The traditional approach to student evaluation that relies heavily on mid-term and final examinations does not work well for distance and online teaching and learning.

#### Reputation of Open, Online, Blended and Flexible Learning

Initial reactions to the pivot to remote teaching via digital tools in Spring 2020 were largely negative. This view in the popular press and general public was reinforced by vocal faculty critics of online learning, many of whom had never taught online or, in some cases, even learned the basics of the learning management system at their institutions. Champions of online learning feared that hastily created and poorly designed remote learning experiences at institutions across the country would seriously damage the reputation of online learning – perhaps to a degree that it would never recover.

Negative views of the pivot to remote instruction often failed to distinguish between the efficacy of online learning itself in the overall learning environment during the pandemic, lacking the social interaction typically associated with school and college attendance in person. However, when faculty and academic administrators in North America have been surveyed on the particular aspects of digital learning from May 2020 up to the present, a much more positive picture emerges. US-based faculty, for example, rate the pivot to remote instruction as largely successful, give high marks to the digital learning environment at their institutions, and indicate their intention to make greater use of digital tools and teaching strategies in the future even in their on-ground classes.

#### **Access and Inclusion**

The pivot to online learning also exposed the true extent of the "digital divide" in North America. By and large, students lacking personal computing equipment and/or reliable internet connections at home chose face-to-face instruction prior to the pandemic. In Mexico, for example, a recent student survey found that while 94% of students studying at private institutions had reliable internet connections at home, only 72% at public institutions reported home Internet access. This survey also found that while 55% of students at private institutions had their own computer or tablet, the figure was only 20% of public institution students. U.S. and Canadian students are somewhat better off, but digital access is a problem to some extent throughout North America.

Under the conditions of the pivot to remote learning, students lacking home internet and personal computing equipment were forced to either self-identify and technical assistance, or drop out of their spring programs. Some institutions attempted to track down students who had dropped out silently to find those who did so due to their perceived inability to participate in digital learning.

Among a variety of strategies to address this problem, many schools created or expanded laptop loaner programs, assisted remote students in obtaining wi-fi access from home or in underserved communities, opened parking lots on closed campuses for students to log into the institutional wi-fi network, etc. Across the continent, federal grants were made to some institutions to address these issues, but the digital divide has been far from resolved and is likely to be the focus of legislative action in the coming years.

Another access issue is tuition, affecting college choice and even the decision whether to attend or not. Students across the continent have been vocal that remote learning provides less than the inperson college experience and should cost less. Some schools have issued tuition rebates for Spring 2020 and some have lowered Fall 2020 remote tuition, but the majority have not. At the same time, planned annual tuition increases in the U.S. have been pared back or suspended by many institutions. The tuition issue appears quite heated in Canada with planned increases in the 5 - 7% range, but some institutions are breaking ranks to hold tuition lower during remote learning. At this point, the longer term impact on online tuition is unclear and likely to be a contentious issue in the next few years.

The COVID-19 pandemic has also disrupted access by international students across North America. Many thousands of international students were stranded in the U.S. when the pivot to remote learning occurred. International students complained that they were paying premium tuition for a world-class education, which their institution was unable to deliver. In the U.S., many found that they were in violation of their visas, which required them to study in-person, which had now become impossible. However, they could not easily return home due to travel restrictions. The situation was even worse when residential institutions required all students to live at home or in alternate accommodations. The pandemic also disrupted international student recruitment efforts in Spring and Summer 2020, because of uncertainty of conditions for international students in the 2020-2021 academic year. The situation in the early months of the pandemic can be fairly described as chaotic.

In the U.S. these effects exacerbated restrictions on international students imposed by the government over the past few years, leading to a sharp decline in international enrollment in Fall 2020 and projected into the immediate future. Some experts predicted a decline of 25% in international enrollment this year, The most recent data on Fall 2020 from the National Student Clearinghouse Research Center, however, indicate a somewhat smaller but still dramatic decline, i.e., a drop in undergraduate international enrollment of nearly 14% and 8% at the graduate level.

Even without similar governmentally imposed restrictions, Canada, with more than 400,000 international students prior to the pandemic is also experiencing steep declines. Canada saw a 22% drop in the issuance of permits for international students for 2020-2021. The government has just announced that institutions with approved plans to quarantine international students for 14 days may resume graduate student admissions.

#### **Acceleration of Digital Transition**

The major higher education challenge of 2020 was the pivot to remote learning, which transitioned almost all in-person instruction to digital formats in a matter of weeks. While it is clear that institutions will pivot back to face-to-face learning once the COVID pandemic is largely controlled, the time frame during which remote learning will continue to prevail is likely to extend through much of 2021. Therefore, the predominance of digital learning in all its formats is likely to remain the dominant mode of instruction at least that long. With over a year of exposure to digital learning, during which many refinements are being implemented at the institutional level, we expect that it will leave an indelible imprint and lasting impact on postsecondary education in North America, much as it will to the rest of the world.

With all secondary and postsecondary students having been exposed to digital learning, and all active college instructors having learned to use and manage digital tools, we anticipate the pace of adoption will grow exponentially. Students will expect it, and faculty who have experienced the ways in which it can support and enhance their teaching will adopt it. The CHLOE 5 survey found that only 3% of sample institutions were not taking steps to revise and strengthen their remote learning courses and expand their use of digital tools and pedagogy.

One anticipated consequence of near universal adoption of remote learning in the fall was a shift of enrollment toward lower cost public institutions, e.g., the open learning network of community colleges in the U.S. This did not happen to the extent predicted. In fact, 4-year public and even more expensive private institutions saw little drop in enrollment. Contrary to expectations, community colleges experienced more than a 15% decline in enrollment. While this phenomenon has not yet been fully analyzed, it appears that financially and academically marginal students in community colleges, strained by the economic downturn during the pandemic, families dealing with the virus, and the effects of the digital divide, chose to delay enrollment or drop out of college.

Based on the decline of open education enrollment during the pandemic, the main factor limiting future reliance on digital learning may be whether the countries of North America can solve the "digital divide," improving internet access in poor and remote communities and subsidizing the cost of personal computing equipment.

## New perspectives on quality for open, online, and flexible learning in North America for the future.

Long-term trends toward incremental increases in student enrollment in online and blended modes of delivery and presentation were disrupted in 2020 by the COVID pandemic and the pivot of nearly all face-to-face delivery to remote delivery by digital means. This meant that nearly 70% of undergraduate enrollment and more than 50% of enrollment shifted online in late February or March 2020. Over the remainder of the Spring 2020 term, approximately 50% of all U.S. college faculty and students who had never previously taken a fully online course were exposed to online tools for delivery and presentation.

The quality of the educational experience provided in this sudden and unplanned for pivot to remote learning was widely varied. Most of the affected faculty members had no prior training in online delivery and presentation, and most of the affected students had no formal orientation to the demands and expectations of online study. While some courses at some of the best prepared institutions implemented established best practices and quality standards, many others relied on the most basic tools i.e., the institutional LMS, discussion boards, and video conferencing tools, to deliver synchronous instruction online, announce assignments and deadlines, and exchange student work and faculty assessments to replicate the classroom experience.

Online administrators quickly identified shortcomings that would need to be addressed, if the pandemic required their institutions to continue mitigation efforts into the Fall 2020 terms and possibly beyond. These issues included:

- Investment in updating and enhancing institutional technology infrastructure and standardization of commonly used tools and technologies
- Addressing the "digital divide" for students without the devices or network access required for online learning
- Expanded faculty training and professional development for online delivery and presentation
- Enhanced student orientation to online study
- Widespread Implementation of quality standards for course design and delivery
- Implementation of standards for student engagement regular faculty/student interaction

In addition, several issues that had been addressed to a limited extent in prior iterations of quality standards for online and blended learning rose in priority due to the practices and problems encountered during the pivot to remote learning. These challenges included:

- Articulating best practices and quality standards for synchronous online presentation
- Articulating best practices and quality standards for building online student communities at course, program, and institutional levels
- Identifying tools and strategies to ensure online student academic integrity

With the continuation of virus mitigation efforts in Fall 2020 and planned for Spring 2021, these concerns are being widely addressed by institutions, quality assurance organizations, and regulatory bodies in the U.S. in addition to being the focus of faculty discussion, debate and research. We anticipate increased attention to quality assurance issues driven by these issues and by the greatly expanded demand for and adoption of online and blended learning as we emerge from the COVID pandemic.

#### References

- Baskin, P., Canada to Let International Students Return, Even as Covid Grows, Times Higher Education, October 2020. Retrieved from the Times Higher Education website: https://www.timeshighereducation.com/news/canada-let-international-students-return-even-covid-grows
- EY-Parthenon, The impact of the COVID-19 pandemic on higher education in Mexico, Colombia and Peru, July 2020. Retrieved from the EY-Parthenon website: https://www.ey.com/en\_gl/strategy/how-COVID-19-has-impacted-higher-education-in-mexicocolombia-and-peru
- Fox, K., Bryant, G., Srinivasan, N., Lin, N., Nguyen, A., (2020, October 6). Time for Class COVID-19 Edition Part 2: Planning for a Fall Like No Other. Tyton Partners, September 2020. Retrieved from the Tyton Partners website:https://www.everylearnereverywhere.org/resources/time-for-class-COVID-19-edition-part-2/
- Garrett, R., & Legon, R., & Fredericksen, E. E. (2020). CHLOE 4: Navigating the Mainstream, The Changing Landscape of Online Education. 2020. Retrieved from the Quality Matters website: https://qualitymatters.org/qa-resources/resource-center/articles-resources/CHLOE-project
- Garrett, R., Legon, R., Fredericksen, E. E., & Simunich, B. (2020). CHLOE 5: The Pivot to Remote Teaching in Spring 2020 and Its Impact, The Changing Landscape of Online Education, 2020. Retrieved from the Quality Matters website:https://qualitymatters.org/qa-resources/resource-center/articles-resources/CHLOE-project
- Miller, M,,The Proctor is In: Assessment Integrity in a Pandemic, encoura, Eduventures Research, August 2020. Retrieved from the encoura website: https://encoura.org/the-proctor-is-in-assessment-integrity-in-a-pandemic/
- University Affairs, COVID-19 Updates, March, August and September 2020. Retrieved from the UA/AU website:https://www.universityaffairs.ca/news/news-article/COVID-19-updates-formarch-2020/https://www.universityaffairs.ca/news/news-article/COVID-19-updates-for-august-2020/https://www.universityaffairs.ca/news/news-article/COVID-19-updates-for-september-2020/

## **Oceania Region**

Dr. Philip Uys University of Adelaide, Australia

# Impact of COVID-19 pandemic in the growth of open, online, blended and flexible learning in the North American region

#### Scale of Growth

Oceania consists of 14 countries: Australia, Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, New Zealand, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. Australia and New Zealand are the largest of these. All educational institutions in Oceania transitioned online in 2020 due to the COVID-19 pandemic.

#### Perceived issues of Quality

Pedagogical quality of courses was sacrificed in many instances due to the rapid move to online learning and teaching. This transition was a crisis response to the pandemic, and we should applaud the initiatives of staff (teachers, central learning and teaching support units, IT units, student support units) and students who under great pressure moved into different modalities of assessment at commendable speed, attitude and success.

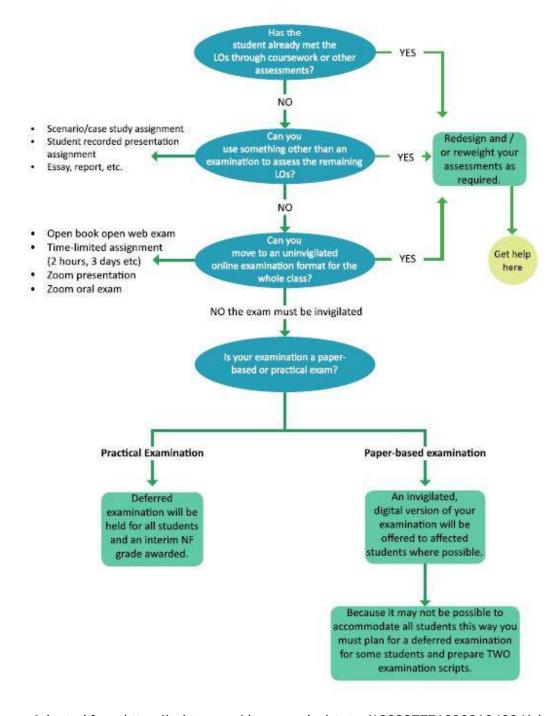
#### Assessment and examinations

Assignments can be quite easily submitted online and marked online or offline via the LMS or other bespoke systems. Most LMSs have extensive gradebooks / grade centres that managed marks, calculated grades and kept track of badges. The key challenge has been dealing with traditional exams. Strategies that emerged regarding traditional exams are:

- Work with the appropriate accrediting bodies and what they really require: some do not require
  exams
- Postpone exams all together
- Diversify e.g. an online test instead of an exam, or more assignments; timed, open book question bank assessments
- Interactive Oral Assessments done online via video conferencing in small courses
- Many started using online proctored exams from home (or for special cases on campus) for a small percentage of courses. Some used ProctorU or Respondus or Examity
- If proctored: "Practice tests/exams" or "Try It Out" exams critical to familiarise students in advance
- For small groups: use video conferencing systems like BigBlueButton/Zoom for online practical exams or online quizzes to be completed in real time
- Break exams up into smaller quizzes e.g. a 60% exam could become three assessments of 20% with each running over successive weeks

- Open book exams could be considered with randomised questions and providing multiple scenarios (being submitted as an assignment)
- In addition to exam anxiety there is also technology anxiety. Moving to online exams is largely a communication and change management exercise
- The timing of the exam needs to include time to set up and check technology, and there needs to be clear and concise channels of support available
- Some unis have developed flowcharts to help decision-making by academics.

One example is that of University of New England:



Adapted from https://twitter.com/davecormier/status/1238877713903104004/photo1

The key advantages of digital assessment that emerged as experienced by students and academics:

- One of the great advantages for students is that they are able to type rather than write
- There is <u>flexibility</u> of when, where, at what pace, and how for all involved
- The possibility of <u>automated marking</u> of student assignments is within reach using artificial intelligence and machine intelligence systems (like eMarking Assistant, Rubric-O-Matic, Gradeassist, MarkUS, Oto, eRater etc.)

#### Reputation of open, online, blended and flexible learning

There is an imminent danger of below par online learning that could lead to an unfortunate backlash against online learning following the pandemic. Many universities had academics uploading PDFs instead of teaching online, or continued lecturing using synchronous tools like Zoom instead of exploring more appropriate educational technologies and active learning approaches.

The increase in digital assignments accentuates the need for academic integrity:

- Students require training in honesty and accountability
- Universities also use software like Copyleaks Moodle plagiarism plugin, VeriCite, Unicheck, DupliChecker, Quetext, Plagiarism Checker, Blackboard SafeAssign, Grammarly, Turnitin etc.

Digital assignments heighten the potential for contract cheating for instance in digitally submitted files and online quizzes. It is a serious and difficult issue to resolve. Three strategies that could help:

- Set questions that require students to reference course materials
- Require students to submit workings, calculations, proofs or justifications for their answers
- · Use oral assessment

#### Access and inclusion

There is no quality for all, without equity and access for all. The digital divide became starker during 2020. Even in developed countries like Australia and New Zealand the digital divide became more evident and was not expected to the degree that it occurred.

#### Acceleration of digital transition

I applaud the initiatives of staff (academics, central learning and teaching support units, IT units, student support units) and students who under great pressure moved into different modalities of assessment, learning and teaching at commendable speed, commitment and success!

Transition in successful unis was guided by using best practice in online learning ("how") without extensive promotion of educational theories ("why"), which academics just did not have time to explore.

## New perspectives on quality for open, online, and flexible learning in Oceania for the future

I trust that institutions will not simply return to how they did things before the pandemic, but take the positive lessons learned above during this pandemic and improve and enrich the quality of assessment, learning and teaching.

Well-designed fully online courses require an amended role for academics, much more of a guide and facilitator, to ensure quality in online teaching.

The quality of practical courses and work-based learning and placements can be enhanced through digital simulation, augmented reality, and virtual reality, and such face-to-face activities can be largely replaced by digital activities.

Online formative assessment played a more important role in providing online feedback to students and academics on the progress of students (given they are not in class), while learning analytics has gained prominence to help analyse how students engage in their courses, leading to increased support for those who need it. These two instruments will continue to grow in significance.

#### References

- ACODE 81 Recommendations (behind firewall)
   https://www.acode.edu.au/mod/forum/discuss.php?d=8017
- Allan, S. (2020). Migration and transformation: A sociomaterial analysis of practitioners' experiences with online exams. Research in Learning Technology, 28. https://doi.org/10.25304/rlt.v28.2279
- Authentic online oral assessment an examination replacement http://transformingassessment.com/sites/default/files/files/TA\_webinar\_30\_apr\_2020\_slides.pdf
- Bearman, M., Dawson, P., O'Donnell, M., Tai, J. and Jorre de St Jorre, T. (2020) Ensuring academic integrity and assessment security with redesigned online delivery. Deakin University University, Melbourne. http://dteach.deakin.edu.au/2020/03/23/academic-integrity-online/
- Detecting and addressing contract cheating in online assessment http://transformingassessment.com/sites/default/files/files/TA\_webinar\_29\_apr\_2020\_slides.pdf
- Exams (at Charles Sturt University) https://www.csu.edu.au/current-students/learning-resources/information-planning/exams
- E-Exams procedures (behind firewall) https://www.acode.edu.au/mod/forum/discuss.php?d=8281
- Implementing remotely invigilated online exams at scale (University of New England)
   http://transformingassessment.com/sites/default/files/files/TA\_webinar\_25\_mar\_2020\_slides.pdf
- Implementing remotely invigilated online exams at scale (University of New England) extended http://transformingassessment.com/sites/default/files/files/TA\_webinar\_25\_mar\_2020\_slides\_ext ended.pdf

- Online Exams (ProctorU) by Griffith University University https://www.Griffith University.edu.au/\_\_data/assets/pdf\_file/0029/1067483/PU-FAQs.pdf
- Ten Radical Ways Assessment Is Changing https://teachonline.ca/tools-trends/ten-radical-waysassessment-changing
- University of New England Online Supervised Exams https://www.une.edu.au/currentstudents/my-course/examinations/olx-project
- University of New England E-Exams procedures Planning examinations during Covid response (behind firewall)
  - https://www.acode.edu.au/pluginfile.php/469/mod\_forum/attachment/11449/Planning%20exam inations%20during%20Covid%20response.pdf

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Supported by the Royal Norwegian Ministry of Education and Research through the Norwegian Agency for International Cooperation and Quality Enhancement in Higher Education.

Affiliate member of the Southeast Asian Ministers of Education Organization.

A key partner for UNESCO.

Enterprise Registry Number: NO971286512 SWIFT/BIC Number: DNBANOKKXXX IBAN Number: NO9571010538070 VAT EXEMPTED.