GOLA!
GLOBAL ONLINE LEARNING ALLIANCE

ONLINE VIDEO MEETING REPORT – 10th February 2021

REMOTE LEARNING FOR SUSTAINABLE EQUITY & ACCESS IN HIGHER EDUCATION

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GOLA Report

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SECTION 1.

Format & Participants

1.1 Introduction

The purpose of this private video meeting for university vice chancellors and senior leadership officers from Africa, organised in partnership with Kortext, was to discuss the best approaches to enabling remote learning for students in higher education. Participants were encouraged to discuss the actions and policies of their universities, and to make recommendations where appropriate.

In response to the Covid pandemic, many officials have spoken of the challenges of remote learning in Africa, with need for a far more robust infrastructure and more competitive pricing for the usage of data. After several GOLA meetings during 2020, many African university leaders and government officials have spoken of the capacity and response of their institutions in enabling remote learning, and their wider importance in supporting the general education community with established technologies and platforms.

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

What technologies and best practices in 2020 proved most successful in enabling students to learn remotely during the pandemic and accordingly what are the lessons learnt for future policy or strategy?

With existing constraints caused by connectivity, especially in rural areas, and the higher cost of data in Africa, what more needs to be done to improve offline study to ensure equitable access?

If physical bricks and mortar libraries remain closed what access to critical texts and papers will be made available to students through digital libraries and e-textbooks?

With more remote learning what are the challenges regarding online assessment, and have you decided an assessment and evaluation strategy for students in 2021?

How can higher education institutions better leverage analytics to improve learning outcomes and inform necessary interventions for students, whilst improving the digital skills development of teachers?

Is there now an opportunity for universities to collaborate as purchasing consortia to gain better value from the edtech and content providers?

1.2 Executive Summary & Key Findings of the Meeting

Our opening speakers discussed the importance of universities being flexible and adapting to the sudden change whilst making every effort to avoid deepening the digital divide. As Sir Steve Smith stated in his closing comments, "there was no handbook for dealing with this pandemic and universities have needed to act humbly and in a collaborative fashion to best meet the challenges faced".

University leaders have noticed a shift in the nature of the relationship between academic staff and students, with a growing mutual respect because of the challenges faced. A massive effort was required from all stakeholders to ensure continuity of education and to maintain the contact between institution and students.

The question remains how best to ensure student engagement when studying remotely and the general feeling is that Covid will prove to be the catalyst for new pedagogies, new methods of learning, and more expert use of technology. Will the Covid experience lead to any significant re-invention of education? Answering such a question lies at the heart of the role of universities. One thing is for certain, good learning analytics shared across institutions can play a major role in student retention, improving student outcomes, course quality improvements and teacher professional development.

The following are not exhaustive, but the important issues drawn from this meeting are:

Preparedness

Nobody was ready for Covid, however, those universities that had already invested significantly in blended or distance learning technologies prior to the onset of Covid fared much better than those that hadn't. Remote learning enforced by campus closures can leverage the technologies deployed within blended or distance learning approaches, but this is also dependent on the digital literacy of both students and lecturers. Selecting educational apps that are intuitive to use can help get up to speed quickly, however, upskilling and improved digital literacy is required for both academics and students before we see a consistent use for edtech across all university departments.

Cost

One delegate commented that "necessity is the mother of invention" and this led to many low-cost and innovative approaches to teaching to remote students. Online synchronous activities (such as Zoom, Teams, etc) can help ensure immediate delivery, however, this didn't work for all remote students (or lecturers) where bandwidth or power availability is variable. In practice it is clear that there is a need to redesign curricula and teaching methods to further support asynchronous learning methods with offline accessible resources.

Assessment

Assessment presented the biggest conundrum of all. The grading of students is essential and concerns remain over the integrity and authenticity of online assessment. Changes to accreditation take too long to respond to the sudden impact of enforced remote learning caused by events such as Covid and strategies need to be put in place to mitigate this risk in the future. In a blended learning environment a continuous approach to assessment can be implemented which may be a better option for the future. Furthermore, much improved formative self-assessment opportunities for students with real-time feedback would enable students to have a more independent and equitable stake in the advancement of their own learning.

Collaboration

Collaboration is the key. Whether it be collaboration amongst universities or with other stakeholders in government and industry. No university can deal with all the challenges alone. Many delegates spoke of the potential for national schemes, such as sharing content, sharing learning analytics, and driving communities of practice around remote learning.

Connectivity

Connectivity and the ICT infrastructure across Africa remains a major challenge that has been tested to the limit with the need for remote learning. This and the cost of data need to be addressed urgently by governments and telecommunications operators. Mitigation strategies included using educational technology with both offline as well as online capability along with a more asynchronous approach to blended learning.

Learning Management Systems

Learning management systems have been in place for some time in many universities but are not generally used to their full potential. This is now changing as the LMS becomes the centrepiece of remote learning, however, an offline capability is essential for many regions in Africa to counter connectivity issues mentioned above. Furthermore, the limitations of remote learning are especially exposed in technical education where courses require continued on-campus time for laboratory work in a blended approach.

1.3 Format of Video Conference & this Report

In section 1.4 we list the one hundred and two participants of this video meeting on remote learning in higher education. The most immediate lesson of online video conferencing is to ensure that every participant has a voice. Small groups are essential. So, after opening statements the event was broken into small groups each with a moderator to take notes and provide a summary.

Prior to the break-out rooms there were opening statements from: Prof Yakubu Ochefu, Secretary General, Committee of Vice Chancellors of Nigerian Universities; and Prof Cheryl Foxcroft, Deputy Vice Chancellor Teaching and Learning, Nelson Mandela University, South Africa. Although all discussions were recorded and transcribed for the purpose of this report, none of the quotes or what was said during the private break-out rooms is made attributable to any one person.

The following was the video conference format:

Part A: Opening statements from Prof Yakubu Ochefu, Secretary General, Committee of Vice Chancellors of Nigerian Universities; and Prof Cheryl Foxcroft, Deputy Vice Chancellor Teaching and Learning, Nelson Mandela University, South Africa.

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

Part C: All participants returned from their break-out groups. Q & A closing session with Sir Steve Smith, Former Vice Chancellor Exeter University and UK Government International Education Champion, hosted by James Gray, CEO, Kortext.

The total time of the video conference was 110 minutes.

After introducing the participants in 1.4, the format of this report is structured around the policy issues and non-attributable quotations. The participants hold senior positions in universities from multiple countries and expressed what they are experiencing as well as their own recommendations.
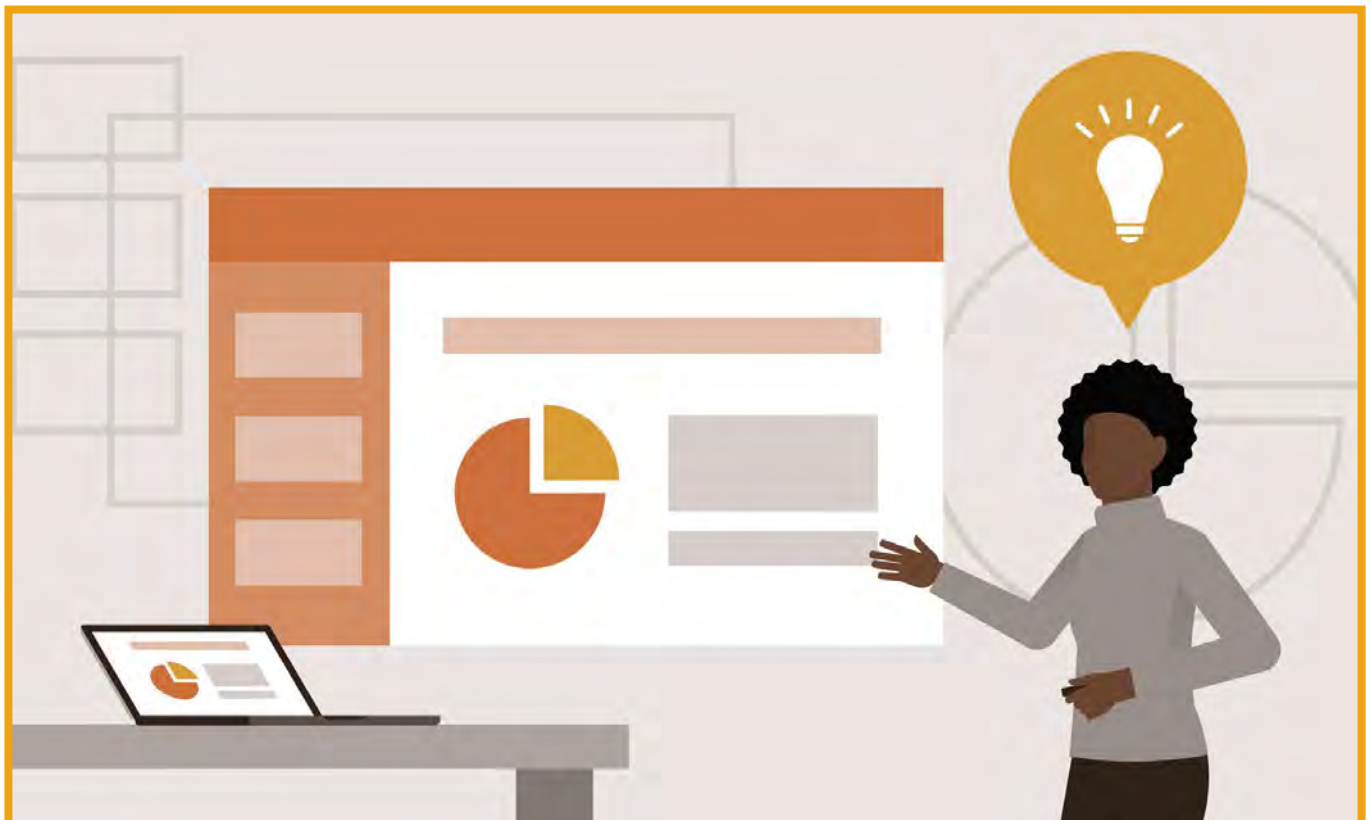
In this report we have done our best to identify the main subjects taken from what participants said to provide a disseminated report that flows as follows:

Lessons, Challenges and Responses to Covid

Connectivity and the ICT Infrastructure

Online & Blended Learning, Systems and Pedagogy

Assessment Concerns, Collaboration and Policy

1.4 Participants

We would like to thank all those for participating and providing such outstanding contributions. The opportunity for them to openly converse in small break-out groups provides us with a discerning judgement on the key issues and immediate policy recommendations. It is an honour for the organisers to host such a distinguished gathering of university leaders. Everyone committing their time during this ongoing period of uncertainty is a true testament to their desire to ensure strong decision around the future of remote learning in higher education. Participants are listed by country, then institution, alphabetically:

BOTSWANA: Oupa Masesane, Deputy Permanent Secretary, Ministry of Tertiary Education, Science & Technology

BOTSWANA: Dorcas Phiri, Deputy Director in the Department of Teacher Training and Technical Education, Ministry of Tertiary Education, Science & Technology

BOTSWANA: Mildred Boduwe, Principal, Botswana College of Engineering and Technology

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

BOTSWANA: Lucky Moahi, Deputy Pro Vice Chancellor, Botho University

BOTSWANA: Gabathuse Blackie Molelu, Director: Centre for Instructional Technology, Botswana Open University

BOTSWANA: Lekopanye Tladi, Dean: School of Science and Technology, Botswana Open University

BOTSWANA: Asalepele Tobedza, Principal, Francistown College of Technical and Vocational Training

BOTSWANA: Martha Mothobi, Deputy Principal, Francistown College of Technical and Vocational Training

BOTSWANA: Boiki Radimo, Head of Department Teacher Training, Francistown College of Technical and Vocational Training

BOTSWANA: Linda Nkatogang, Head of IT Department, Francistown College of Technical and Vocational Training

BOTSWANA: Maipelo Pelontwa, System Analyst IT Support, Francistown College of Technical and Vocational Training

BOTSWANA: Mildred Boduwe, Principal, Botswana College of Engineering and Technology

CANADA: Andrew Bates, Product Consultant, Kortext. *Moderator*

ETHIOPIA: Dr Eba Mijena, Vice President International, Emerging & Director General for Higher Education Academic Affairs, Ministry of Science and Higher Education

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

GHANA: Prof Ben Honyenuga, Vice Chancellor, Ho Technical University

GHANA: Adolph Adu, Acting Dean, Ho Technical University

GHANA: Prof Nana Osei-Wusu Achaw, Vice Chancellor, Kumasi Technical University

GHANA: Dr Timothy Crentsil, Dean, Kumasi Technical University

GHANA: Ebenezer Boakye, Registrar, Kumasi Technical University

GHANA: Eng Mamudis Hamidu, Lecturer, Kumasi Technical University

GHANA: Prof Justice Solomon Korantwi-Barimah, Pro Vice-Chancellor, Sunyani Technical University

GHANA: Samuel Obour, Registrar, Sunyani Technical University

GHANA: Dr Hope Pius Nudzor, Senior Research Fellow & Critical Education Policy Analyst, University of Cape Coast, Institute for Educational Planning and Administration

GHANA: Rev Dr Raymond Tangonyire, Senior Lecturer, University of Cape Coast, Institute for Educational Planning and Administration

GHANA: Prof Nana Aba Amfo, Pro Vice Chancellor, University of Ghana

GHANA: Michael Tagoe, Acting Provost, University of Ghana, College of Education

KENYA: Prof Justus Wamukoya, Technical Project Manager DLP & Dean - School of Information Sciences, Moi University

KENYA: John Sergon, Executive Fellow, Institute of Public Police & Governance, Strathmore University

NAMIBIA: Dr Colen Tuaundu, Director: Programme Development Unit, Namibia University of Science and Technology

NAMIBIA: Agathe Lewin, Instructional Designer, Centre for Open Learning, Namibia University of Science and Technology

NAMIBIA: Joy Hambabi, Instructional Designer, Centre for Open Learning, Namibia University of Science and Technology

NAMIBIA: Antoinette Wentworth, Coordinator: Educational Technology and Instructional Design, Centre for Open Learning, Namibia University of Science and Technology

NAMIBIA: Wilhelmina Louw, eLearning Programme Developer, Programmes & Material Development, Namibian College of Open Learning

NAMIBIA: Prof R Kavena Shalyefu, Deputy Director: Academic Centres, Centre for Professional Development, Teaching and Learning, University of Namibia

NAMIBIA: Dr Helena Miranda, Deputy Director: Academic Affairs & Research, University of Namibia

NAMIBIA: Erkkie Haipinge, Deputy Director: eLearning. Lecturer: Technology Enhanced Learning, University of Namibia

NAMIBIA: Dr Hertha Pomuti, Senior Lecturer: Curriculum Instruction and Assessment Studies, University of Namibia

NAMIBIA: Dr Pamela February, Lecturer: Educational Psychology and Inclusive Education, University of Namibia

NIGERIA: Prof Yakubu Ochefu, Secretary General, Committee of Vice Chancellors of Nigerian Universities. *Opening Speaker*

NIGERIA: Prof Tor Iorapu, Vice Chancellor, Benue State University

NIGERIA: Prof Peace Chinedum Babalola, Vice Chancellor, Chrisland University

NIGERIA: Dr James Akinola, Senior Member of ICT & LMS Team, Lecturer, Chrisland University

NIGERIA: Prof Ogunbodede Eyitope, Vice Chancellor, Obafemi Awolowo University

NIGERIA: Prof Funmi Bickersteth, Lecturer (OAU) Pro Chancellor (FUBK), Obafemi Awolowo University & Federal University Birnin Kebbi

NIGERIA: Prof Ganiyu Olatunji Olatunde, Vice Chancellor, Olabisi Onabanjo University

NIGERIA: Prof John Deji Agboola, Deputy Vice-Chancellor – Academic, Olabisi Onabanjo University

NIGERIA: Prof Lilian Salami, Vice Chancellor, University of Benin

NIGERIA: Prof Florence Obi, Vice Chancellor, University of Calabar

RWANDA: Prof Silas Lwakabamba, Former Minister of Education Rwanda, Atlantis Group

SOUTH AFRICA: Dr Ntsoaki Malebo, Senior Director: Centre for Innovation in Learning and Teaching, Central University of Technology, Free State

SOUTH AFRICA: Dr Johan Badenhorst, Director: e-Learning and Educational Technology, Central University of Technology, Free State

SOUTH AFRICA: Busi Mokhele, Director: ICT and Chief Digital Officer, Central University of Technology, Free State

SOUTH AFRICA: Betsy Eister, Director: University Library, Central University of Technology, Free State

SOUTH AFRICA: Tembisa Khomo, Deputy Director: Quality Enhancement, Central University of Technology, Free State

SOUTH AFRICA: Prof Wendy Setlantoa, Acting Dean: Faculty of Humanities, Central University of Technology, Free State

SOUTH AFRICA: Dr Ben Kotze, Assistant Dean: Teaching and Learning, Central University of Technology, Free State

SOUTH AFRICA: Dr Luzaan Schlebusch, Acting Assistant Dean: Teaching and Learning in the Faculty of Humanities, Central University of Technology, Free State

SOUTH AFRICA: Prof Cheryl Foxcroft, Deputy Vice Chancellor Teaching and Learning, Nelson Mandela University. *Opening Speaker*

SOUTH AFRICA: Mike Swanepoel, Project Leader: Digital Learning Experience Design & Innovation, Nelson Mandela University

SOUTH AFRICA: Prof Robert Balfour, Deputy Vice Chancellor: Teaching & Learning, North-West University

SOUTH AFRICA: Prof Somadoda Fikeni, Public Service Commissioner - Associate Professor UNISA, Public Service Commission & UNISA

SOUTH AFRICA: Dr Nicola Pallitt, Technology-Enhanced Teaching and Learning Specialist (Lecturer), Rhodes University

SOUTH AFRICA: Prof Andrew Crouch, Vice Chancellor, Sol Plaatje University

SOUTH AFRICA: Dr JP Bosman, Director: Centre for Learning Technologies, Stellenbosch University

SOUTH AFRICA: Dr Vathiswa Papu-Zamxaka, Deputy Vice Chancellor, Research, Innovation & Engagement, Tshwane University of Technology

SOUTH AFRICA: Dr Etienne van Wyk, Executive Dean: ICT, Tshwane University of Technology

SOUTH AFRICA: Prof Ruth Hoskins, Dean of Teaching and Learning, College of Humanities, University of KwaZulu-Natal

SOUTH AFRICA Prof Norman Duncan, Vice-Principal: Academic, University of Pretoria

SOUTH AFRICA: Poppy Tshabalala, Vice Principal for ICT and Chief Information Officer, University of South Africa (UNISA)

SOUTH AFRICA: Prof Solomon Magano, Acting Executive Dean : College of Agriculture and Environmental Sciences, University of South Africa (UNISA)

SOUTH AFRICA: Prof Francois Strydom, Director of Centre for Teaching & Learning, University of the Free State

SOUTH AFRICA: Prof Diane Grayson, Senior Director: Academic Affairs - Office of the Deputy Vice-Chancellor, Academic, University of the Witwatersrand

SOUTH AFRICA: Dr Nokulunga Ndlovu, Lecturer: EDIET Division, School of Education, University of the Witwatersrand

SOUTH AFRICA: Faizal Ladha, CEO, Govtek. *Moderator*

SOUTH AFRICA: Ravi Govender, Managing Director, Govtek. *Moderator*

UGANDA: Prof Celestino Obua, Vice Chancellor, Mbarara University of Science and Technology

UGANDA: Prof Nixon Kamukama, Deputy Vice Chancellor Academic Affairs, Mbarara University of Science and Technology

UGANDA: Martha Kyoshaba Twinamasiko, The Academic Registrar, Mbarara University of Science and Technology

UGANDA: Wilson Adriko, University Librarian, Mbarara University of Science and Technology

UNITED KINGDOM: Sir Steve Smith, Former Vice Chancellor Exeter University & International Education Champion, UK Government. *Closing Speaker*

UNITED KINGDOM: Aisling Conboy, Higher Education Specialist, Department for International Trade

UNITED KINGDOM: James Gray, CEO, Kortext. Closing Speaker & *Moderator*

UNITED KINGDOM: Jeremy Duckworth, CFO, Kortext. *Moderator*

UNITED KINGDOM Andy Alferovs, Company Director, Kortext. *Moderator*

UNITED KINGDOM Richard Horton, Commercial Director, Kortext. *Moderator*

UNITED KINGDOM: Robin Gibson, Marketing Director, Kortext. *Moderator*

UNITED KINGDOM Jason Beech, Channel Director, Kortext. *Moderator*

UNITED KINGDOM John Garrould, Associate Director B2B Fulfilment, Kortext. *Moderator*

UNITED KINGDOM Francesca Russell-King, International Channel Manager, Kortext. *Moderator*

UNITED KINGDOM Corinne Figg, Events & Sales Office Manager, Kortext. *Moderator*

UNITED KINGDOM John Glassey, CEO, Brains Global. *Host*

UNITED KINGDOM Claire Urie, Head of Government & International Relations, Brains Global

UNITED KINGDOM Victoria Tate, Head of Education Partnerships, Brains Global

ZAMBIA: Lt Col Prof Naison Ngoma, Vice Chancellor, Copperbelt University

ZAMBIA: Prof Sumbye Kapena, Acting Deputy Vice Chancellor, Copperbelt University

ZAMBIA: Prof Overson Shumba, Director: Academic Development, Copperbelt University

ZAMBIA: Dr Donald Chungu, Director: Distance Education and Open Learning, Copperbelt University

ZAMBIA: Dr Ruth Mubanga, University Chancellor, Unicaf University - Keystone University

ZAMBIA: Prof Ronald Kaulule, Vice Chancellor, Unicaf University

ZAMBIA: Dr Christine Phiri, Vice Chancellor, Unicaf University

DISCUSSIONS

SECTION 2.

Discussion

2.1 Opening Statements

The opening statements were provided by Prof Yakubu Ochefu, Secretary General, Committee of Vice Chancellors of Nigerian Universities; and Prof Cheryl Foxcroft, Deputy Vice Chancellor Teaching and Learning, Nelson Mandela University, South Africa.

Prof Yakubu Ochefu

The opening statement of Prof Yakubu Ochefu is in conjunction with the presentation as per appendix A.

Prof Ochefu's presentation shared Nigeria's recent experiences in the delivery of remote learning in higher education. The 73-year-old Nigerian system has 191 universities (92 public, 99 private). In Nigeria, Covid forced upon the sudden shift from face-to-face to remote learning, resulting in three key concerns:

- The robustness of the ICT infrastructure for remote learning
- The level of hardware, software, and communications
- The ownership of laptops and devices amongst students

The challenge for the academic staff, included their own knowledge gap with remote learning technologies and the lack of defined online pedagogies – extending to little more than converting lecture notes to PowerPoint. The knowledge gap witnessed amongst students has been the challenges around navigating learning management systems and particularly novel forms of online assessment. Not least of all, without an online learning policy framework, one runs into regulatory issues around schooling time and rules for online testing.

That said, the universities in Nigeria rose to the occasion with multi-level interventions to deal with those challenges of the remote learning infrastructure. Universities that did not have an existing learning management system or found costs prohibitive, managed to adapt using open-source frameworks and using their own in-house IT expertise to develop ways of accessing free online educational content. We have certainly seen an increase in the partnerships with private

sector solution providers and negotiating flexible deals allowing for cost objections to be removed from the equation. Equally we are seeing the telecommunications companies working with Nigerian universities to tackle the problems of cost and quality of internet bandwidth. Blue, one of the largest networks, has a tertiary institution management scheme, combining enterprise solutions with learning management systems with a communication backbone for university access.

Discussions are continuing with the regulatory bodies on how to craft global best practices with local realities because those realities simply do not have the equipment to fulfil best practices. For example, to take advantage of online assessment solutions requires a laptop camera and many students do not have it. Content also must be adapted and in Nigeria there are various ongoing content aggregation projects. The Tertiary Education Fund is running a project to database all university content of the last 60 years, and the Committee of Vice Chancellors of Nigerian Universities is working to with partners to deploy anti-plagiarism software that can search both local and global databases.

The big elephant in the room is content. The need to adapt content to the virtual environment. How do you produce all the different learning materials from all the different subjects into virtual content with animations, video, audio, interactive pages – all of the requisite quality and standard? In Nigeria, as with everywhere else, we are still grappling with this question. Currently, there is slow adoption of virtual libraries, and the use of virtual and augmented realities. For online assessment, the regulators need to know what type of questions and in what format examinations may be if they are to replace "in-school" examinations. This means the way we set questions must change. The setting of questions must be base more around problem solving, critical thinking and invoking a student's own originality.

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We will look at 2020 as a very rough year, with the additional cost imposed by remote learning making matters worse. Yet going forward the need to understand, upskill and invest in remote learning systems is essential, along with having to deal with changing face-to-face learning spaces, such as smaller classes to meet Covid protocols. Reducing class size can only be done in conjunction with a robust blended learning policy and infrastructure. With the right investment, this does offer advantages in the university sector with students being able to access learning materials and to collaborate with each from all over the world. Academics are also migrating to attend far more virtual seminars and conferences – a change that will become permanent.

Only just a couple of years ago, people were sceptical about online and blended learning. Project based learning is now gaining acceptance. Online based learning is gaining mainstream acceptance. In Nigeria, the National Open University has over half a million students. We see a great deal of change going on and in Nigeria that is just a summary of the activity of where we are now – with so much more to follow as we tackle the new challenges of delivering higher education.

Prof Cheryl Foxcroft

The opening statement of Prof Cheryl Foxcroft is in conjunction with the presentation as per appendix B.

Prof Foxcroft introduced the approach of Nelson Mandela University, Eastern Cape Province of South Africa, in finding new ways to restart student learning, accounting for a very fluid situation at the beginning of the pandemic, requiring agility and flexibility. The first concern, was of course, the student well-being and prioritising health and safety; then committing to ensuring that the university provided learning opportunities for students to complete the academic year. The largest proportion of students are from Eastern Cape but only a third of students are in and around Port Elizabeth, where the main seats of the university lie.

Initially, even contacting students, especially in remote areas of KwaZulu Natal, Limpopo and Mpumalanga, was difficult. Then the university needed to ascertain what connectivity and devices the students had access to. They did not have the information per student and are taking that lesson forward by making sure such information is gathered at the registration stage of all future students. Most of the universities in South Africa are connected to a national education network with various service providers with the availability of up to 30 gigabytes of data. 60 – 65% of students had a device and the

university distributed those they had in stock to first year students and since then have procured another 4,800 laptops for students.

Knowing there were connectivity challenges, the university tried to ensure a 'data light' approach to the learning activities and materials. Another consideration is that many students do not have conducive study spaces at home, thus requiring the creation of different pathways to allow students to restart the learning at different times of day and in different ways. The agility of the university and the flexibility of the academic staff meant implementing such a system where you have different groups of students at different times. Starting with those who could learn online, then distributing materials to those who could not. The changing lockdown requirements then allowed for bringing some students back on campus for experiential learning purposes and having a more conducive environment, while retaining online learning resources.

Prof Foxcroft referred to a study just published by the South African Department of Higher Education and Training at the end of 2020 called *"Students' Access to and Use of Learning Materials, Survey Report 2020"*. The lead author in the national study was Prof Francois Strydom, Director of Centre for Teaching & Learning, University of the Free State (also participating in this GOLA meeting) and Nelson Mandela University is now using some of the data in that report to help plan the 2021 academic year.

Note: the aforementioned survey report is not part of this GOLA report but has been uploaded onto the gola. education website and is available to download at:

https://gola.education/wp-content/uploads/2021/02/Students-Acces-to-and-use-of-Learning-Materials-South-Africa-DHET-Survey-Report-2020.pdf

One notable highlight is how much students were particularly dependent on free data and free access to sites with appropriate educational content. But this was not enough, certainly not for assessments. This added to the challenges for students already overwhelmed with needing to learn the use of new software or learning management systems to carry out their studies.

So, the planning of the forthcoming academic year is based on a phased approach to resuming teaching and learning that is less overwhelming for both students and staff alike. The priority is to get students learning again and by being flexible to add to the quality of the educational experience as students get used to online learning. This has meant a considerable amount of capacity building

for the academic staff, who are equally anxious. The philosophy has been to start off simply and build on that rather than to imagine a fantastic course with all the bells and whistles from the start.

In tracking progress, the university has noted some key lessons over the last year. Notably, we have witnessed a shift in the relationships between students and staff, with a growth in mutual respect and understanding of the challenges and the hard work required. A lecturer may have witnessed students climbing a mountain or travelling large distances just to get a signal and likewise the students recognised the huge amount of hard work being put in to enable the online learning. Everyone has recognised the importance of continuous communication and of flexibility and adaptability.

Most important has been the relevance of the learning materials and activities that engage students – a necessary ingredient of online learning. As Prof Ochefu also mentioned in Nigeria, assessment is a challenge, especially around the integrity of online assessment and the readiness of both academics and students. The learning materials survey has shown us that students have learnt two main things: to regulate their own learning and to take more personal responsibility for their studies. Feedback amongst students after a rapid introduction to online learning is that they already have a better feel for what the second semester is going to be about. The self-regulated learning has seemingly allowed for students to figure things out for themselves, where they may have normally just sat in class waiting to be told such things.

There is now a need to formulate standards around the design of digital educational resources, learning materials and the methods for engaging students. The access to content and materials is a key question. Should there be some form of open-source national repository where universities and institutions can share materials? Such a system exists in other parts of the world, such as China where they have an association of universities who agree to share online materials across student bodies.

Not forgetting, that whatever the online resources, such learning must be complimented with a conducive learning environment. Do institutions need to share learning centres? For example, when a student needs to learn remotely but cannot make it to a particular campus and needs alternatives.

Moving forward, monitoring, and checking the progress of students is needed to be able to report on the numbers of students who have completed the academic year. Nelson Mandela University initially had 10% 'silent' students (about 3,000) – those who simply could not be found. It took a couple of months of hard work, talking to student leaders, obtaining phone numbers, and finding those students to get the number down to less than 2%.

Prof Foxcroft's final comment was to particularly emphasise how everyone has come together in this pandemic to ensure the greater benefit for all. Lecturers and students have accepted the challenge to quickly shift to online learning in manner that has taken courage and collaboration. Personal benefits will come after that and these acts of togetherness in the education system are things we should also be reporting.

2.2 Lessons, Challenges and Responses to Covid

Participants expressed that one of the biggest lessons over the last year has been around the readiness of academic staff. Nobody has been through such an experience before, there is no playbook and many staff in universities were simply not equipped – both in terms of a good standard of laptops and the necessary pedagogical guidelines for teaching online. The balancing act now is to ensure a focus on the needs of academic staff as well ensuring the continuity of education for students. Many universities are now organising online workshops and seminars to help build ICT capacity amongst the teaching staff.

What is evident amongst all the universities who participated in the meeting was that everyone had a 'good news' story, everyone could speak of favourable actions and decisions under the most

testing of circumstances. At the University of Ghana they found, with the right guidance, students were quick at adapting to having lectures using Zoom video. There were inevitable bumps in the road when transitioning, but along with other measures was typical how a bit of innovation and creativity amongst academic staff ensured the continuity of education.

Some universities, especially those in concentrated Covid 'hotspots', have also had to deal with the students and parents being apprehensive about the return to campus. The institutions have had to invest in a lot of public relations, communicating their programs of hygiene, cleaning and care for the health and well-being of all students. Again, this is a matter best tackled with a multi-stakeholder approach, bringing in the professional bodies, community groups and health practitioners.

In reference to the aforementioned survey of South African students' access to online learning materials, the Department for Higher Education and Training was looking at carrying that out in May 2020 but at the time the universities were simply to overwhelmed with responding to the huge demands placed upon them by the pandemic. Eventually, the survey went ahead in September/October after a period where students had some experience of online learning and represented good timing to collect illuminating data. The survey is now being used amongst academic staff because it gives them clues in terms of what they can do to improve the learning experience of students.

At North-West University in South Africa, they found that during 2020, those students who had registered as distance learners pursued their program normally with very few disruptions. However, for on-campus students who had to switch to having to work from their homes at a distance from the university, in the vast majority of instances, there was a need for communication and student support. Care and kindness in the transition cannot be underestimated, particularly to support students working from very remote and very congested living conditions, as many poorer students do. For members of staff who were not so familiar with technology, they had to make that transition to a blended set of pedagogies and approaches to technology much more quickly. So, student support and academic staff professional support were critical ingredients to the success in managing the transition.

Some universities immediately adopted a low technology, low-cost approach to teaching and learning online to ensure immediate delivery. This means not having online synchronous learning because of the data costs that entails for students

and for the institution. Applications like Zoom have been useful insofar as it enables lecturers to pre-record lessons, rather than attempt to teach in a synchronous manner. Looking at the download rates of distance learning students over many years, it could be seen that students much prefer to download a pre-recorded lecture than to participate in an online synchronous experience, partly because of the data breakages or load shedding in South Africa – the problem of power outages that South Africa has experienced over the last decade.

At North-West University South Africa, The Centre for Teaching and Learning intervened very early on in March 2020 to develop a set of design principles for teaching materials for the online modality. Furthermore, the experience they had with the existing open distance learning students was very helpful in developing a pedagogically informed and educationally sound approach to teaching and learning in this low technology, low immediacy, and low-cost approach. They have also learnt through distance education, that the use of many smaller assignments is not as educationally stimulating, or educationally rigorous, as, for example, the development of project-based longer assignments; so, they applied that kind of insight into the online experience of students. This meant a kind of mediation step between what was happening pre-Covid, and what needed to happen with the transition to online learning to ensure an effective pedagogy. That means, not simply uploading all existing material onto an LMS, and then expecting students to somehow absorb it all unproblematically.

In Nigeria it was initially the Federal Ministry of Education that ordered everybody to transition from face-to-face to online learning, resulting in people grappling with all manner of solutions. So, it was like a mixed fruit juice of some sorts. Some were using Microsoft Teams, some were using Google, some using Zoom etc. But in terms of contents, that became a challenge because there were no standards, leading to teachers converting lectures to PowerPoint and putting it on the LMS. So, there was no strong adjustment as far as content development is concerned. It was soon realised that the likes of The National Open University have been doing this for a while, so other universities started utilising the vast amount of content that had been developed over the years for many subjects, by the Open University. It also seemed that the private universities were better oriented, in terms of handling remote learning. They did not have any problems whatsoever with the transition. They had infrastructure, they had the facilities, and the lecturers were quick to do the transition. It was the public universities that were heavily challenged. The public universities could not

move as nimbly as the smaller, private universities.

In Uganda when the pandemic hit they were in the middle of mid-term exams meaning they did not complete the program. At that point, there were difficulties in keeping in touch with students. Although institutions like Mbarara University of Science and Technology had a learning management system, it had not been utilised fully to the level required. By October 2020, the Ugandan Government issued a directive for universities to start fully engaging students online, requiring the upgrading of learning management systems. They completed the second semester in December, but they could not assess students online because the systems were not robust and secure enough. So, for students taking examinations, the government allowed them back on campus to complete the semester. Like many science and technology universities, there remains the fact that many courses simply cannot be taught completely online.

In South Africa, we have seen variance amongst universities. For example, the University of South Africa (UNISA) which attracts more of the students who cannot afford economically to study in other institutions and hence has a lot of students living in remote and rural areas. With level five lockdown and all students at home, they had a large student population who just did not have any network connectivity in their homes. This had a major impact on students completing courses; even though the university provided data for them, they were in areas where there is no network coverage. Up to 20,000 students missed their exams and communicating with them was a real challenge as the university employed bulk SMS to reach out to learners. Coupled with the problems of load shedding in South Africa it resulted in students dropping out of exams.

Amongst the technologies and best practices in 2020 that have proved successful in enabling students to learn remotely during the pandemic has been the use of asynchronous learning in other words, recordings of lectures. Students being able to return to asynchronous material as a refresher or to clarify has proved a learning asset. The University of Pretoria is now recording all lectures and making them available to students, whether in a hybrid mode or an online contact mode. The essential lesson of 2020 has been the importance of finding a way to engage students when teaching online and having platform that allows interaction between the lecturer and students.

In Botswana, the Ministry of Tertiary Education, Science and Technology started off by looking at how it can keep students and staff in the colleges safe,

by adhering to the health protocols and providing guidelines of how they should conduct themselves to avoid contracting this virus. They also used a phased approach when re-opening colleges, allowing people to get used to these new protocols. In the pedagogic discourse there is a shift from the face-to-face interaction in the process of teaching and learning. Botswana is heavily oriented to 'in classroom' learning, but there is a shift, which means coming up with a comprehensive E-learning policy, to enable the government to provide the necessary resources for online learning.

For Kumasi Technical University in Ghana, their greatest problem was how to evolve a new framework within which to carry true remote learning. With face-to-face, being so entrenched for so many years, and then suddenly the need to go online presented a real challenge that they are still grappling with trying to resolve.

What has been noticeable in several African countries, not least Kenya has been the distinct difference between the resources available in the private sector and the public sector, because the private sector universities have managed to continue their teaching and programs to a very large extent. The lesson here is that there still needs to be much more investment in the future to equalise this situation in the country.

In response to Covid, we have seen university libraries invest a lot more by subscribing the digital sites to be able to access digital materials. They have also strengthened the digital repositories within the library, holding materials that students can access. Regularly staff can get an update of what new digital resources have been provided are being provided by the university, and what sort of facilitation can be provided by the university to help students and staff to access these materials. Post-Covid, universities have relied more on e-books, and our electronic resources.

Some universities have given their students tablets, but these have limitations, and many are now moving away from tablets to laptops, which are more expensive. Innovative ways of dealing with the cost may include building the cost of a laptop into overall tuition fees. As an institution this is not always satisfactory because the students still think it is the university's equipment and if anything goes wrong they come back to the university for repairs. One idea is to advertise to companies and negotiate lower prices for students, though this may still require bulk purchase and storage by the university.

2.3 Connectivity and the ICT Infrastructure

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

In terms of mobile connectivity, mapping across Africa, the largest networks remains 2G which simply is not good enough to access the internet and particularly use applications such as e-learning platforms. 2G remains predominant with 3G and 4G only concentrated around urban areas. Integrating technology into education is wonderful but a big problem remains if one looks at the current situation of connectivity across Africa. When considering technology in education, we need to think of something sustainable and it needs to be embedded into educational policies. The policies need to be strategic and any revisions must have outcomes well-defined along with encouraging creativity and innovation.

One important challenge in South Africa was to leverage influence with governments in relation to the telecommunications companies to make access to online learning free and data free for students. That was very difficult to get done, but it was critical and a huge achievement, such that students even in the poorest communities could access the curriculum in the same way that students from middle-class or more wealthier households could. This has been an important characteristic in South Africa over the last year – the leveraging of influence between government, state agencies and the private sector to support the education enterprise.

In Nigeria, it was more of a series of localized arrangements with the different telecoms operators. They could not bring them all to the table to have a structure like South Africa, with each of them competing amongst themselves to see what best they could offer. Take for example the offer of double data. If you pay for say, one gig of data, it automatically doubles in size, but the catch is that you must be on campus, and here we are talking about remote learning where you must be able to access at home. In some cases, operators have been dragging their feet, so universities have tried to engage the national body in the Ministry of Communications and Digital Economy about giving the operators some concessions, maybe some form of tax break, allowing them to afford to give data to students.

The situation in Ghana when the lockdowns started was for some of the universities to procure date, at their own cost, for students. A student was given four gigabytes free, though there remained challenges such as those living in remote communities who were not able use the online learning management systems properly. They had challenges, reports from those living in remote communities that they were not able to use the system properly. Kumasi Technical University, for example, eventually, had a good number of students able to use the system with the free data, and the cost being borne by the university. But when the university opened and the government opened the system for students to come back on campus, the university has not dropped the idea of using online learning. Now they expect students to pay for it themselves. The government has started giving free WiFi to universities, only available on campus; if students are not on campus, they do not get free WiFi.

In Botswana, the biggest challenge, like elsewhere across the continent, has been connectivity. Some telecoms operators whitelisted pages so that students were able to access content, without the need to go to university. From a delivery perspective they have been able to adapt quickly and reach out to the students because they have already been using a learning management system as a mode of learning for quite some time. But the biggest challenge was when they had to go back to homes with a lack of internet facilities. In Botswana, the regulatory body, the Council of Higher Education took up the responsibility of lobbying for the education sector, with the ministry, in order to make

sure that data has been provided to students so that they can access learning materials.

Rwanda has invested considerably in fibre across the country, 4G is well-developed in the capital Kigali and the country is pushing hard to upgrade to a 5G network. The cost of data has also come down considerably. Some may see Covid as a blessing in disguise as some ICT for education programs were stalling, there still needs to investment in developing more online content and the digital knowledge gap of academic staff needs addressing.

In Kenya, the government has, for some time, recognised the challenges of connectivity and lack of electricity in some places, which sits in a wider societal context. They came up with the 'last mile project' to install electricity and have been working with internet service providers to ensure that most parts of the country are accessible in terms of internet connectivity. It might be helpful for universities to ride on such efforts by the government. For now, the challenges remain of not being able to access all the learners, and the learners not able to access content provided by the university. In Kenya, the Parliamentary Service Commission are setting up in every constituency digital hubs, to assist citizens in accessing services.

It remains for many institutions that the large parts of their student populations are from rural areas where there is a cliff-edge drop off in broadband connectivity compared to their urban university campuses. Much of the hard work done during the last year has been every effort to connect, communicate and engage with all those students with poor access. It is an inequity that must be addressed as a matter of priority as we start facing the huge consequences of Covid and its impact on are social interactions, including education. If blended learning is to be the norm then equitable online access has also to be the norm.

2.4 Online & Blended Learning, LMS and Pedagogy

The sudden onset of Covid has meant that the tertiary education sector, across the board, is still trying figure out what are the best practices for online learning, and certainly the question over online assessment has many unresolved problems. That said, when it comes to best practices and maintaining of standards to meet qualification criteria, then plenty of lessons are available from a well-established global network of open universities.

Both educators and industry have been asking themselves, when is that digital learning tipping point going to happen? Now it has been forced

upon us by what has happened with the pandemic and health care around the world. Going forward is about people, their interactions, communication, and the appropriate use of technology – a real mix in terms of how to manage everything. All the existing research and study into university digital learning, never contemplated that students would not be on campus at all. Apart from the face-to-face learning environment, university campuses are very well equipped and have good bandwidth to cope with the intensive use of data. In the context of the pandemic, many of the online tools have been around for some time but their usage has been forced upon academic staff in a way many were not prepared for. Yet, staff have quickly embraced digital technologies, though have had to be cognisant of the wide variety of different situations students find themselves in in terms of access at home and ownership of devices. This means lecturers producing maybe three or four different pedagogic pieces of supporting material to fit the varying circumstances of the students.

Fundamental to the success of shifting online, as experienced during the pandemic, has been the universities and academic staff 'getting creative'. As previously mentioned, necessity being the mother of invention inspired creative pedagogy, such as in some science work one can do certain simulated activities online and then bring students on campus for a short, concentrated period for the necessary practical work. In the case of nursing students, they returned sooner so as to learn in physical settings. How much can be done online differs discipline to discipline.

The adoption of a digital pedagogy and the move away from face-to-face teaching is vitally important issue in terms of upskilling and capacitating academic staff. Another area which universities will need to address is the risk assessment for which the register will clearly need to be altered as online learning and assessment is introducing a whole new set of risks.

Some universities have had a learning management system for over a decade now, but they have not been utilised fully in a way that pedagogy should be. A key aspect of remote learning is not just the systems but the guidelines for students, such as time management and self-direction in learning. This is not so much a technological conversation but a pedagogical one, because no matter what one does with assessment, whether it be e-proctoring or artificial intelligence, it is the design of learning that remains the most important thing. A well-designed course is the best way to ensure academic integrity.

The University of Free State ran a digital fluency survey prior to Covid to ascertain how confident their

staff were with digital tools. The outcome was that over 40% of the staff believe they needed training, even in basic tools. The same applies to students, who just because they may be 'digital natives' does not make them digitally literate nor know how to learn online. It is also important to consider that say a video recording of a lecture is supplementing and not supplanting the normal face-to-face lecture.

In Zambia, the Copperbelt University is the second largest university and has had a department for distance learning established since 1987. Prior to Covid, there was a lot of focus on growing their own platform, now they are moving to incorporate the technologies of other providers, such as Zoom, Moodle, and Google. But they are trying to focus more on the providers that allow students to access what has been offered after class, i.e., content that has a legacy. The use of technology from more providers is expensive and it needs to be understood that students are constrained in terms of finances, especially when being sent back home, having to access the open learning facilities from home. Concessions from education technology providers and collaboration amongst institutions to give them more purchasing power are necessary ingredients if enabling large numbers of young Africans in digital learning.

Ho Technical University in Ghana had already piloted a learning management system before the pandemic. When the outbreak emerged, the university leveraged that to extend to the whole school, but there was a knowledge gap. This knowledge gap has to do with lecturers and students. So, they had to embark on vigorous training and orientation on how to best use the system. Existing challenges remained around students living in remote areas with poor connectivity and those without access to devices. Also, before Covid, there was a prejudiced perception about the quality and standards of online studies and online degrees and certificates.

In Botswana, Botho University is relatively small, and they have close contact with all the students, so the onset of the pandemic did not present a challenge in terms of communicating with the students. Furthermore, they had already started the transitioning to online learning and so when they started they already had in place quite a lot of online material for students. Every registered student is issued with a tablet – a policy adopted for nearly a decade and supported with a Blackboard learning management system. Subsequent to that when the university had to transition fully to online then they felt the challenges of data, particularly for those students who went back to their respective towns and villages.

The question of engagement during online lessons is very interesting. On the one hand the lecturer does not have the advantages of seeing students arrive in the class, watching their body language and getting a feel for their level of engagement in the subject. On the other hand, in the digital environment, there are a different set of measures. Proper use of the data can give an objective measure of response times, involvement in online chat and the answering of questions. The question is what is engagement and what are we trying to measure? We need to go beyond the attendance register, summative assignments, and proof of learning. Digital technology has the ability to give very precise non-subjective measurements, but what is it we want to measure when teaching online?

While the infrastructure challenges in Africa, especially in rural settings, remain and we wait for more investment (or sweeping change brought about by 5G), it is critical to work now on improving offline study. The increased use and repurposing of learning management systems in African universities in the last year opens up the opportunity to use features like downloading while on campus to have study material for when remote. This in conjunction with finding equitable methods of ensuring students have the laptops and quality of device to tap into the resources available on e-learning systems.

Part of looking at how universities will shape up after the pandemic, will be to look at their libraries and ensuring that most of the resources will be available electronically. As at the policy level, for teaching and learning at universities are increasingly encouraging their lecturers to utilise open education resources. It is also consistent with the values of universities, that academic material should be available free of charge, or at least not at exorbitant fees.

The use of open architecture learning management systems and leveraging all their features to meet the strategic goals of a large university is a lesson learnt from 2020. With open source there is also a community of developers and users worldwide constantly upgrading and adding more content to the system. Canvas is an example of this, with something like 30 million current users and a mobile app, which is critical in the African context. The LMS also has the advantage of configuring permissions for students to download content and view it offline.

As Prof Foxcroft was saying about students being scattered across the country, one area of analytics that has seen extensive use is the login data. Even when students were hard to contact, some universities have found that careful monitoring of whether students were logging into the LMS or not

helped identify those 'lost' students. This allowed for better targeting by emails and SMS, even phone calls to obtain a response and find the students. The login data can also help identify student participation in individual lessons. Proper use of such data can have a real positive impact on reducing the dropout rate. In some strange way, remote teaching has enabled the academic staff to pay more personal attention to their students, as individuals.

For improved engagement between learners and teachers, we need to start making sure that the two parties have the capacity to do it, to build the necessary skills and competencies to deal with all that it takes to use the new technologies. To cope with so many adjustments requires flexibility both parties need to be helped in dealing with it. What we need is capacity development on the part of the lecturers and their new competencies, and capacity development on the part of the students and their digital literacy. Capacity building for both students and staff on the blended learning approaches is key.

Some colleges, such as Francistown in Botswana, already had in place fairly robust online resources, accessible both on and off campus. They also had in place a good orientation course for their online materials which was linked directly from the homepage when Covid came. Wherever possible they have emphasised to course developers the need to provide the students with open educational resources. One silver lining, it seems, that has come out of this pandemic is how the learning of new digital skillsets that may have taken several years to be absorbed has been compacted into just a few months. Everyone's digital literacy has improved and for some, exponentially.

Many of the technologies, software, learning management systems were already being used by universities but not to their full potential and Covid has acted as a catalyst for learning and teaching, and IT departments to take a good look at their existing technical resources and determine how to repurpose and make the most of what was already at their fingertips. Learning management systems have been installed many years ago but have simply not been used. The on-campus nature of university education does not demand it. 2020 saw a new sense of urgency to make the most of the features and benefits of an e-learning system. We seem to be now entering the phase of 'normalising' these technological solutions to remote learning. The challenge of stable and fast broadband in Africa remains. If 5G truly lives up to its potential it could be to broadband what the mobile phone was to fixed landlines.

In the case of technical education, many of the programs demand practical, in-person training, and this has still meant bringing students back to campus but split into smaller groups. They were invited on campus to meet the lecturers face-to-face to take some practical lessons for a few days, and then they would go back to their homes and continue the online training. There is very much a feeling that this blended model is here to stay. There have been many positives, and experience of the limitations imposed by the pandemic is no better expressed in the saying that "necessity is the mother of invention."

It must not be forgotten that it is not too long ago that blended education options were maybe of lesser quality in terms of learning outcomes, but with Covid, blended learning is now mainstream. Of course, those at an advantage are those that have already deployed digital platforms, learning and information management systems and even provided students with devices. Their transition was a lot easier when closures started taking effect, so if outcomes are going to be more aligned with hybrid and blended learning then there needs to be an acceleration of implementing equitable access to avoid an enhanced digital divide.

Beyond the technical skills of academic staff, the next step is to evaluate the effectiveness of online learning. Strategies will need to be modified and evolve as we learn over time the best methodologies for engaging students and ultimately learning outcomes are the end goal. This is the hard part, to make the link between technology skills and

the teachers' ability to deliver an online lesson. The methodology is not the same as in the classroom, therefore curricula cannot be the same.

2.5 Assessment Concerns, Collaboration and Policy

Educators are saying they have never spoken so much about assessment as they have done in the last year. It remains a major conundrum as a necessary requirement of blended learning will mean major shifts in the types of assessment that can robustly grade students online. The past couple of decades has seen policy makers and educators attempting to address the best forms of assessment and to enhance the quality of evaluation, but with Covid we see a renewed sense of urgency in addressing how to evaluate when there is greater use of online and blended learning. This requires new teacher competencies and building their capacities.

Any reforms to the system of evaluation and a shift towards continuous assessment is a huge undertaking. It requires reorienting academic staff to have the skills to make project-based evaluation, including the ability to assess how a learner has developed the required competencies. Covid has seemingly acted as a catalyst, pointing to the need for more formative assessment that is fitting with the demands of blended learning. Such assessment needs to be flexible, to be learner-centric, focussing on ensuring that the student has both learnt the skills and the ability to apply them. An important question remains: can formative assessment be fully objective in the way summative exams are? Many educators are still adamant that summative assessment gives the clearest picture of whether a learner has achieved competencies or not. That said, amongst participants in the meeting, the general feeling is that the way forward will definitely be more project-based continuous assessment in tertiary education.

Developing online assessment, needs the regulatory bodies to play a strong leadership role in working with universities and centres of teaching and learning to set appropriate standards such that any online exam can be certified compliant. Along with the necessity of blended learning there needs to be a national effort with collaboration amongst the government and universities. Without a national drive, universities have been solving the challenges on their own, leading to a patchwork of standards and quality of teaching. That national drive, in all African countries needs to be done with considerable support from the telecoms operators and a commitment for greater investment in the ICT infrastructure – specially to ensure the cost of data is reduced substantially.

The training of staff in developing good quality online assessment materials is now a priority for some universities to ensure authenticity and to have in-built protections to ensure the integrity of the exam. One application, as piloted by Rhodes University, is e/merge Africa, an educational technology network for researchers and practitioners in higher education. It is different to proctoring, not as bandwidth intensive, requiring students to take selfies to verify their identity. The app also listens to sounds in the student's space, so one can hear whether they are talking to someone or discussing the assessment with a third party. Yet, it remains that the way questions are asked is the key to having a secure online assessment. Furthermore, while evaluating online it is essential to have robust connectivity, as people have spoken of the difficulties when, say, the presentations freeze in the middle of an examination.

Another point raised was how distance learning qualifications in the past have come with a stigma, the idea that it was a second-rate qualification compared to an on-campus degree. This mindset needs to adjust and accordingly the university sector needs 'pull their socks up' to ensure that what is offered online is of the same quality and standard. Consistency will be a key issue as the uptake of online learning and assessment gathers pace.

Copperbelt University introduced online exams for the first time, last year. They did notice a fair amount of cheating and there was no way of knowing whether it was the registered student who wrote the exam paper. They saw higher marks, especially amongst so-called weaker students. From the continuous assessments in previous years the university had benchmarks, yet when it came to writing the online exams their performance was very good! The university mitigated such dangers by implementing a blended approach with some assessment done online and some components on campus.

Universities have professional qualifications that have statutory requirements, so they have had to do a lot of negotiating with the regulatory and professional bodies to ensure they are meeting those statutory requirements. In some cases, requirements have been relaxed, which is a major challenge in some professional qualifications. More needs to be done in developing a robust and academically respected framework for integrating online learning within professional qualifications.

Many in the academic sector commented on how much more, in the last year, they have talked to and collaborated with other sectors and stakeholders.

The psychosocial considerations impacting both staff and students is an important consideration that needs attention and accordingly the participation of people not normally within the university 'sphere of influence'. Dealing with Covid was one thing but dealing with students who are going to be left behind as result of Covid is another.

Regarding online learning materials, there does seem a strong argument for more inter-university collaboration or even a full national repository. Certainly, more should be done at the national higher education level if blended learning is to be the norm. A national effort, or a network of collaborating universities can help with both the cost and the building and sharing of applications. This needs to be supported with a research evidence-based approach as highlighted by opening speaker Prof Cheryl Foxcroft.

In Nigeria, they are speaking of how Covid has inspired the idea for all universities to come together to cope with the huge challenge of updating curricula, redesigning teaching models, and developing digital pedagogies. The academic standards in Nigeria are controlled by the National Universities Commission and examinations are structured according to the approvals of both the senate of a university and the commission. To administer assessment online will require considerable training of the examiners and approvers. There is a need to reflect and look with critical eye at the entire curricula for Nigerian universities, with the aim of producing something that is line with the post-Covid world.

It was pleasing to see in some of the discussions, how participants from different countries and institutions used the opportunity of the meeting to develop their own relationships between each other. For example, in Zambia they were interested in the African Excellence Centres. This is a project funded out of Germany that Nelson Mandela University cooperates along with other universities in Africa. This GOLA meeting opened the doors for university senior leaders to talk about the possibilities of cooperating regarding online resources.

Namibia, with a relatively small population, has only four distance education institutions in the country. But they have been working together, long before Covid, and shared in the benefits of an umbrella group called the Namibia Open Learning Network Trust. Sharing amongst the four institutions has helped reduce the duplication

of resources. An interesting point raised by Prof Ochefu in his opening statement, is the potential of a national repository, available to full time students. Instead of having to keep reinvent the wheel then just do it once and share it.

In terms of improving connectivity, as well as the actual ICT backbone, there are means of leveraging partnerships and developing new software that can enable students to connect with computer labs to access all their materials. Universities, such as with the Eduroam model in South Africa are able share an existing network and when students enrol they can connect when near any member university, even if it is not their own university. Connecting back into networks, through hubs like this is typical of the solutions we start seeing more of as institutions start sharing their problems and how to solve them together. The real power lies in the number of universities that can roll out such activities.

In Africa, there are several countries like Kenya, Uganda, Zambia and more that have a Universal Service Fund, imposed as a form of tax on the mobile operators. The funds are a legal requirement, yet there remain questions over whether they are being properly used. Now is a good time for money to deliver proper equity – especially in digital technologies, both the infrastructure and devices. An increase in online learning and the use of digital technologies, ultimately benefits those same operators who are contributing to the Universal Service Fund. It is a virtuous circle – if properly focussed and well-managed. A new digital divide created by Covid is of deep concern and any efforts to bridge the gap must be welcomed.

Existing online universities in Africa have experienced several regulatory challenges around accreditation.

They will have both students and lectures in multiple countries, and they will have courses with content provided from a range of jurisdictions within and outside of Africa. Online learning involves the recruitment of online lecturers who may be anywhere in the world. Yet the institution will be registered in one particular country, say Zambia, and the Zambian authorities will say you have to have Zambian lecturers to obtain the accreditation. This is not possible with online universities, offering curricula and evaluation from more than one country. Everywhere, the regulatory agencies must understand that tertiary education is now operating in a new terrain.

We heard several examples of how universities have innovated over the last few months, to overcome the problems of both connectivity and the usage of data. In Africa, the cost of data is a major issue and with limitations can often mean that students cannot access the right software. One idea from Ghana, was where they built their own in-house virtual, cloud-based lab using open-source software such that students can access the lab through their browsers. The interface is designed in such a way that the processing is done on the university's lab computers, with answers coming back via the browser, thus reducing the need for students to have access to large amounts of data.

In the case of Uganda, the two major telco companies did provide free data for university management and students to access online for some months, which then expired in December. Then it fell back on to universities to resort to how they are going to ensure that both the university and students acquire data. Previously, they have had the Research Education Network of Uganda, Uganda called RENU, which had provided some subsidised internet connection to universities in the country. So, for universities that have subscribed it is possible to conduct online learning. Pretty much all the challenges were based around universities being traditional in the delivery of learning, with the education infrastructure needing face to face learning, as opposed to online learning. Although almost all universities have learning management systems, they have been lying dormant. On the one hand there is the idea that lecturers have been reluctant to employ the learning management system, and so have not introduced the students to it. Certainly, Covid has now sparked the use of online learning and the utilisation of the learning management systems that already existed in the institutions. Now almost all universities have been cleared by the Ministry of Education to carry out online learning, with them inspecting institutions, to check the suitability and the preparation in conducting online learning. The blended approach

is necessary because not every program has been fully developed for online learning, such as practical courses, where the students must come on campus. But what can be delivered online is being delivered online.

One notable point about the use of open-source online material is the question of intellectual property. IP is an important feature of maintaining the integrity of research in higher education so it is likely that greater use of online resources will force universities to ask the question: what is their intellectual property? With the need for greater collaboration and more universities forming consortia, they will need to keep a close eye on many aspects of higher-level academia, science and research that may have been taken for granted in the past.

It was pleasing to hear the statement "you cannot replace the teacher". The teachers must be at the heart of a future where it is necessary to have remote learning, where there will be more online assessment, and electronic resources will be major part learning content. These new infrastructures change the nature of teaching, when all educators know that great teaching lies at the centre of engaging students and producing outstanding learning.

Universities have already spent a great of money on digital resources and further subscriptions to online journals and e-books can prove costly. The drive for many is to direct the academics to open access resources and make use of journals and content that are available without any copyright restrictions. Academics should know how to develop their own open access resources to upload and share with colleagues on digital platforms. Librarians have a role to play here in familiarising academics with open online education resources and helping with relevant available data of a high quality.

Several participants pointed to national differences and the need to avoid falling into a "one size fits all", especially for blended learning policies; but all countries will have a new generation of digital learners with new competencies. Teaching and pedagogy is very different with online learning and preparations need to be made accordingly. Even though there may be differences between countries, the post Covid landscape could well lead to better international collaboration with shared technologies and the leveraging of regional purchasing power with the edtech industry.

So, can we now look at the Covid experience as an opportunity to reinvent education? How can we

best deal with these opportunities that will make e-learning in the universities viable, so that learners do not lose out in the process? Any answers to such a question needs to be considerate of the fact that we are fundamentally asking what are the duties of the institution in a technologically dependent post-Covid world? If the core principles of providing remote learning solutions are based around equitable access for all then it is likely the university, unless very well-endowed, cannot do it alone. The procurement of devices, data and software subscriptions puts further pressure on the household. All educators are still tackling these very tough questions and fast realising that without multi-stakeholder collaboration the basic principles of equity and access will remain elusive.

2.6 Closing Q & A

The closing Q & A was with Sir Steve Smith, former Vice Chancellor Exeter University and now UK International Education Champion, in conversation with James Gray, CEO of Kortext.

James Gray: In terms of your leadership experience at Exeter when Covid first impacted, can you give us little insight into the lessons learned about managing this rapid change and moving from crisis management to a more formalized mechanism?

Sir Steve Smith: Well now I have been in over 110 meetings in this new role for the UK government. The Covid issues we are talking about have come up in every single meeting in every single part of the world, and no one has got the answers. The first thing to say is we are all trying to find a way through these problems. There is not a manual or handbook on the bookshelf, that you take down and turn to the page that says "pandemics" – what to do in case. I was Vice Chancellor for 18 years, I was president of Universities UK, with a great deal of experience in the sector, but it blew us all away. The lack of answers, persists to this day, and that is immensely stressful for the students, for the professional staff, for the academic staff, for the leadership of the universities and for governments. If there is one message, then that is the only way we get through is by forming partnerships, working together, and being honest and humble enough to admit that we do not all have the answers ourselves. The response has worked because organizations have come together in the community. The one thing I would say, psychologically, in terms of mental health for everyone, it has been very difficult, and we are all still coming through what looks like being quite a long-term problem that we need to adapt to.

James Gray: Today we have had several conversations around student support and the whole issue of mental health. Could you expand on how you dealt with that at Exeter University?

Sir Steve Smith: The first thing we learned was the need to work with the student body and not just instruct them. We have asked students all the time what they want, and the answers are not always necessarily the ones you may expect. So, for example the first thing we thought, let us put everything online. At Exeter we spent £8.7 million in the spring of last year, moving everything online, and moving all our core texts and the actual lectures. We thought that was a big ask, but it was the most straightforward thing we had to do. What we had not considered was the impact on staff and students of how to learn in this new environment. So, we went through really a big learning phase where students came increasingly to us in terms of the learning experience, including the studying on their own and not being able to have the kind of social life and the cultural life that they were used to. This could not be sorted out by money but by altering the way in which we related to them. This is an important takeaway and the mental health issue generally has been the number one worry for many of us running universities in the UK. At Exeter, we doubled the Mental Health Resource three years in a row, we doubled, then doubled and then doubled again. And it is still not enough. What we have learned is that it is easy to think about technical solutions on how to teach, but it is not so easy to think about the solutions that give the overall university experience for students.

James Gray: A major challenge for universities and higher education providers is the transition to more blended environments. What are you views on the key issue of how such a transition to more blended environments will impact on assessment?

Sir Steve Smith: Firstly, the road ahead is not going to be the same as the route we just travelled down. Early on we thought that we would have a bit of disruption for a month or two, then we will return to normal. In the past we have always considered in-person learning and distance learning as two separate things. Now the intellectual point is that the educational experience looks much more merged for the future. I do not think there will be that distinction in the future. So, I think delivery will be much more edtech based and am certain that we are not going to go back to the old, just sitting in a classroom for everything, model. Secondly, I think there are some interesting things going on with learning analytics,

because the big thing is how we can teach remotely in a way that enables us to support learners. This will be key to helping universities understand the students' online journey and learning, as if he or she was sitting in front of us. This needs a collaborative multi-stakeholder approach, to help us all achieve quality outcomes and quality of the feedback and assessment. So, the key takeaway again, is simply that the future is not going to be like the past. The danger is we all try and win the last war. We all try and solve the problems of a year ago, yet now it must be a much more blended approach, combined with ensuring that the materials are delivered, and that the bandwidth is there. Crucially, we need to be able to assess the individual student in the way we would do in a face-to-face situation.

James Gray: We can certainly all learn from one another and over time we will see how people think about the changing nature of their roles. Hence, what skills do you think Vice Chancellors really need to focus on in terms of managing this change?

Sir Steve Smith: The priority is to focus on safety and on health, both physical and mental, as an absolute requirement for university leaders. Both students and staff need to be informed of and appreciate the pressures the system can come under and understand that it may not always work. The broadband may not work, the book may not be there online, but that does not mean we do not care. Shared empathy and understanding will be critical for university leaderships. Secondly, will be how vice chancellors are able to adapt. I think there is a danger if you are a university leader, like me, 18 years of running a successful university, then you think you have most of the answers. What the pandemic taught us is we had none of them. The financial decisions were easy for us in the
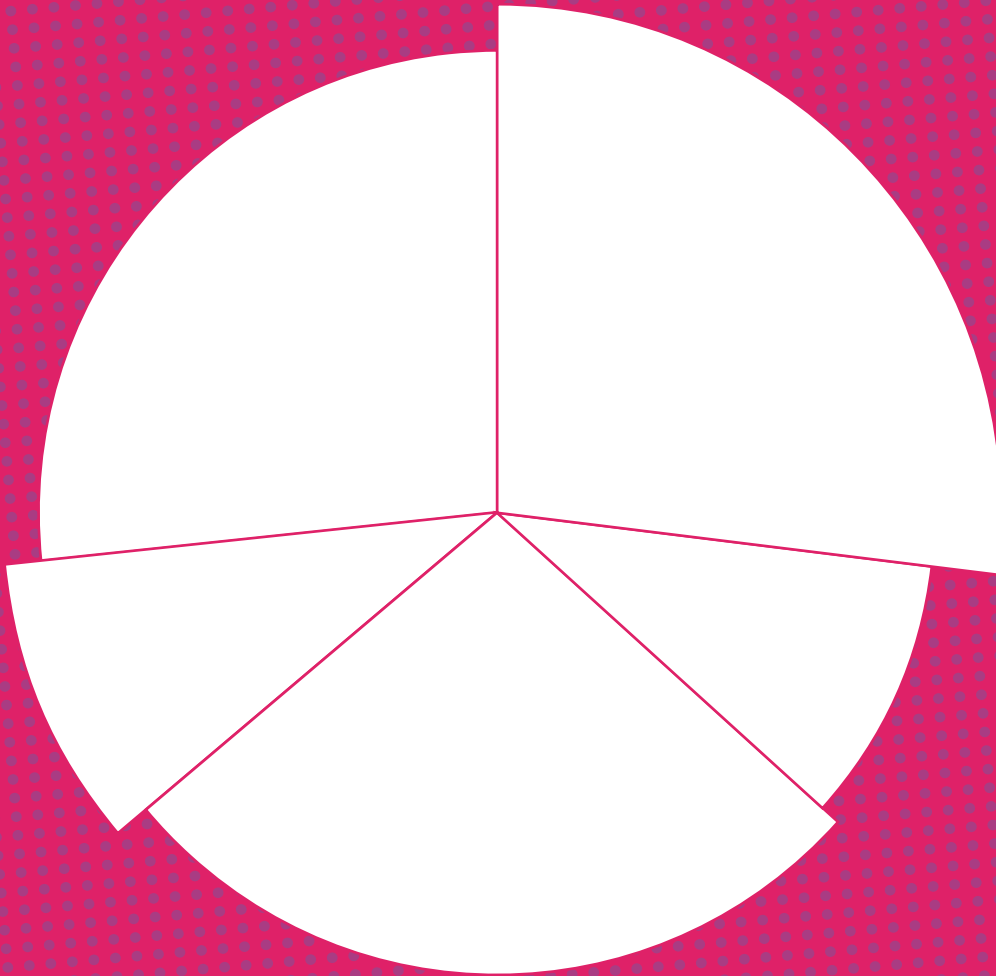
UK, because the UK government backed us; they underwrote the finances to the tune of two and a half billion pounds if we needed it. So, we could say, right, let us put everything online, let us spend the money. That is not possible everywhere, but what we did not understand was the extent of the psychological impact and the longer-term pedagogical adjustments that will be necessary. Finally, partnership is the way forward. In everything I have seen in the last year, partnership worked; we get through this by working together. The notion that we could do it as individual, autonomous institution has gone. The sector worked best in the UK when it went to government with an agreed set of priorities, which we defined in meetings between ourselves. We went to government with a set of agreements, then we approached the private sector, all based on the different skills that are needed, under these new circumstances. These are not skills that the traditional university automatically has and if it means swallowing our academic pride to find trusted partners, then so be it.

Sir Steve summarised by emphasising how universities have withstood a lot of challenges over the millennia. Universities have a lot of skills and this is clearly a culturally significant moment. When the pandemic came in March last year, we expected university registrations would drop but in fact there was a 2.6% increase in the UK when we have 2% fewer 18-year-olds. Universities are central to the future economic and social good of a country, but they cannot stay as they are and that the need to adapt and be flexible is the big takeaway.
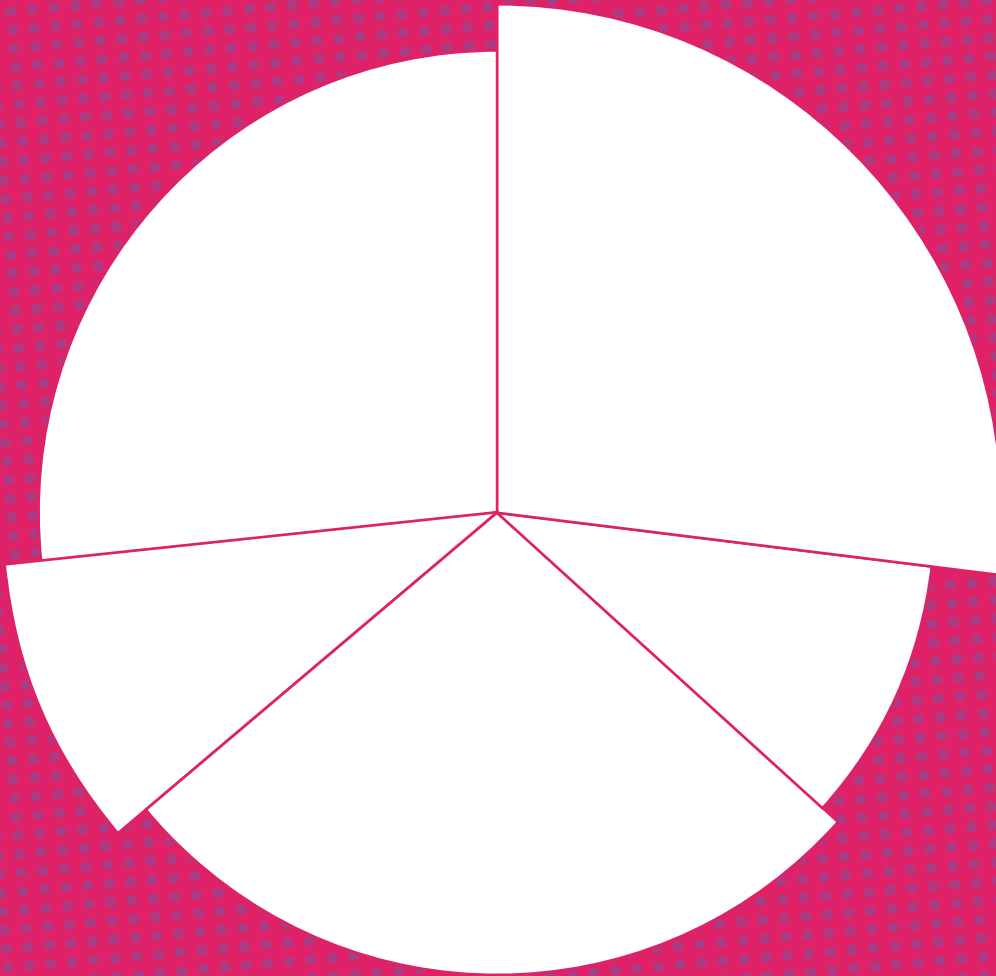
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For further details or copies of this report, please contact john.glassey@brains.global

APPENDICES

APPENDIX A

Remote Learning for Sustainable Equity and Access in Higher Education: Sharing Some Experiences from Nigeria.

Yakubu A. Ochefu Ph.D.

Secretary-General, Committee of Vice Chancellors of Nigerian Universities

February 2021

Nigeria University System at a Glance

73 years old and currently has 191 licensed Universities

➢92 Public : 99 Private

➢44 owned by Federal Government

➢48 Onwed by State Governments

➢16 of those owned by the Federal Government are specialized (Open University, Health, Agriculture, Technology, Maritime, Armed Forces etc).

➢13 of those owned by State Governments are also specialized.

➢12 public and private Universities are licensed to provide Distance Learning

➢We have one National Open University

Pre-Covid Teaching and Learning Situation

- Like in many parts of the world, Remote Learning was a niche activity in many Nigerian Universities pre-covid.

Covid and Post Covid Situation

The sudden shift from face-to-face to remote learning, forced by Covid, caught many Public Universities off guard.

- Poor levels of Remote Learning Infrastructure (hardware, software and communications)

- Poor quality of devices owned by students (lack of smart phones, tablets and laptops)

- Knowldege gap of Lecturers (beyound converting powerpoint lecture notes to various forms of online content formation and deployment)

Covid and Post Covid Situation

- Knowldege gap of Students (Navigating LMS, Online assessment).

- Cost and Quality of internet bandwidth for Universities, their staff and their students.

- Regulatory issues that mandates students to undergo a specific number of physical contact times with their teachers.

- Big issues relating to how to undertake laboratory and other practical and studio based assignments.

- Regulatory issues regarding online assessments.

Light on the Other side: Multi-level Interventions

Sn	Challenge	Interventions
1	Remote Learning Infrastrucutre	Increased used of locally developed LMS and Proctoring solutions based on Open Source frameworks)
2	Knowledge gap (Staff and Students)	Greater use of free online content to improve capacity and also increased funding for training.
3	Devices	Increased partnerships with private sector solution providers using "as-a-service models. (Device-as-a-Service; Infrastructrue-as-a-service etc)
4	Cost and Quality of internet Bandwidth	Greater conversations with Telco's to improve the quality of internet access and reduce the costs. Many Telcos are introducing special bouqets for University communnity. For example, the GLO-TIMs, Airtel double data bonus
5	Regulatory Issues	Greater conversation with the Regulatory Bodies to see how to best graft global best practice with local realities.
6	Content	Various Content aggregation projects are on-going. Tetfund is financing a Thesis and Dissetation Project aimed at digitizing all undergraduate and post graduate research outputs going back 60 years. The CVC is set to deploy EagleScan; a plagiarism detection software that searches against local and global databases. The project is being supported by Tetfund, JAMB and NUC

Eagle Scan Plagiarism Detection Software and Repository

A platform developed by the CVC in collaboration with ICT teams from public and private Universtiies in Nigeria.

❖ It is a homegrown solution that has been necessitated by the high cost of foreign anti-plagiarism software as well as the lack of reflectiveness of local Nigerian challenges in their content, indices and parameters of assessment.

❖ Its Features include
- Plagiarism Checker; Peer Review
- Local Repository; Global Repository
- Document Comparison
- Similarity Index
- Grammar Checker
- Originality Certficate
- Support ticketing System

❖ EagleScan provides Nigerian Universities an affordable platform the helps improves originality and aggregates local content.

Global Repository

- 40,000+ Subscription journals
- 40,000+ Open Access journals
- 80,000,000+ Journal Articles
- 7,000,000+ Conference papers
- 300,000+ Dissertations
- 4,000+ Institutional repositories
- 12,000+ Publishers from around the world
- 70+ Billion web pages
- 170+ Million academic works

Local Repository

- Integration with Nigerian University's OER
- Direct submission to the EagleScan platform during similarity check
- Integration with third-party data providers
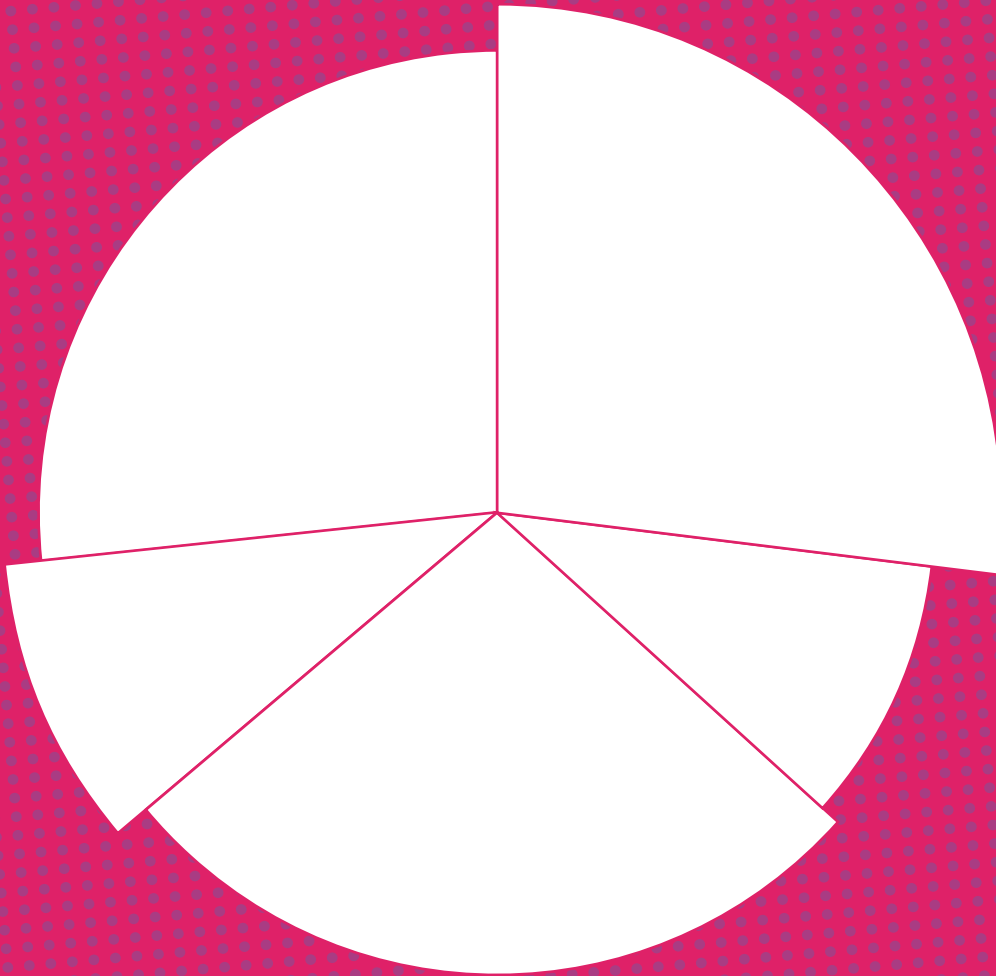- Facilitate digitization of University's Documents

The "Elephant" in the Room

➢ How to produce various forms of local content (animations, interactive pages, video, audio) with the right quality and standard.

➢ Issues relating to how to undertake laboratory and other practical/studio based assignments.

➢ Very slow adoption of Virtual Laboratories, VR and AR Technologies; 3-D Laboratories are still rare.

➢ Issues regarding online assessments remains a concern for regulators.

> ➢ Can multiple choice question formats replace other forms of examinations?
> ➢ How do you ensure quality control and compliance?
> ➢ With very low levels of devices in the hands of students, how do you implement remote proctoring solutions?

Going Forward on a "forced agenda"

- ✓ Between Covid and a protracted Industrial dispute with Teaching and non-Teaching Unions, Nigerian Universities (especially the public ones) had it rough in 2020

- ✓ Extremly poor funding in the past has been excerebated by additional costs to navigate remote learning regimes.

- ✓ Curriculum and Minimum academic standards are lagging behind globally recognized 21st century benchmarks

- ✓ Roboust collaboratory frameworks are emerging but are painfully slow.

- ✓ Remote Learning is helping Universities deal with over crowding in classrooms. Computer based testing is becoming standard for large classes.

- ✓ Virtual seminars and conferences are also increasing participation at international events that were seriously challenged in the past due to high travel and accomodation costs.

- ✓ Project based Learning is slowly gaining acceptance. Students now know that they have access to learning materials from all over the world

- ✓ Online based learning is gaining in acceptability across the Industry. The National Open University now has over 500,000 students.

Thank You for Listening
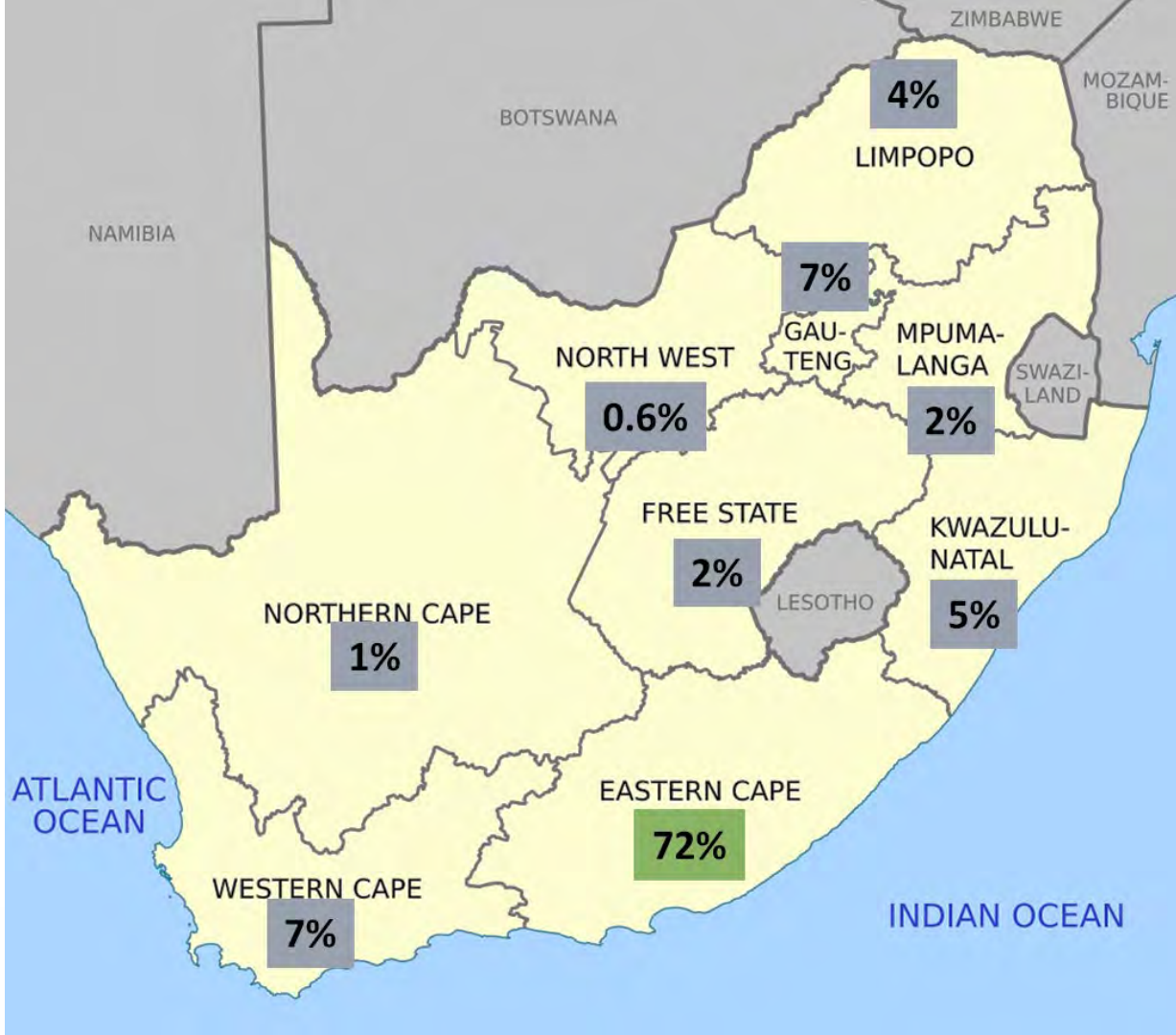
APPENDIX B

Our approach - Principles

1. **Prioritising the health and safety of students and staff. This includes being human-centred and prioritising care and kindness.**

2. **Remaining agile, adaptable, and flexible amid the fluidity and uncertainty of the pandemic.**

3. **Unwavering commitment to provide all our diverse students with the academic opportunities and support required to progress through and complete the 2020AY.**

4. **Foregrounding our core values of excellence, social justice and equality, and integrity in the implementation of all our academic activities.**

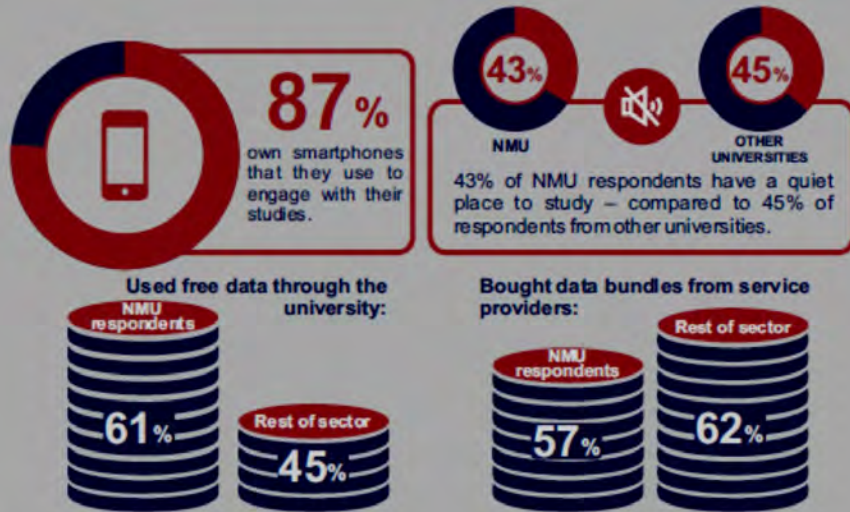**Where our students were when they are/ were learning remotely**

Our approach – Enablers (1)

1. **Data** (30 GB) and **devices** (1100 more distributed to NSFAS and missing middle students; 4800 more procured). **Data-lite** approach.

2. Given the differing contexts, circumstances and needs of our students, and especially the challenges students experience to learn remotely, as many of our students live in townships, informal settlements and rural areas where online access and a private space to study are a challenge, **we created different pathways which allowed students to restart their learning at different times and in different ways** (online remotely, learning materials distributed, online on campus; experiential learning).

Our approach – Enablers (1) - Challenges

87% own smartphones that they use to engage with their studies.

43% of NMU respondents have a quiet place to study – compared to 45% of respondents from other universities.

NMU 43%
OTHER UNIVERSITIES 45%

Used free data through the university:
- NMU respondents: 61%
- Rest of sector: 45%

Bought data bundles from service providers:
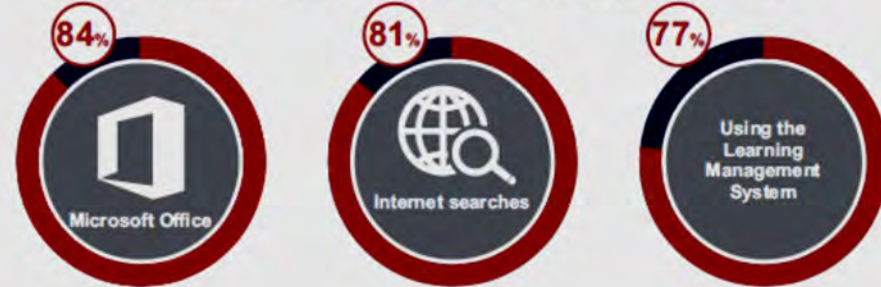- NMU respondents: 57%
- Rest of sector: 62%

Benefits of learning with technology: *"Improves my knowledge on using devices like laptop. I've learned how to get used to typing which helps me to spend adequate time on my tests and finish on time."*
Challenges of learning with technology: *"Connectivity issues, studying at home with a lot of family members can be a struggle sometimes having to balance house chores and studying."*

31% were not prepared to use the technology required for their courses when entering NMU

NMU respondents believe they would be more successful if trained in:
- **84%** Microsoft Office
- **81%** Internet searches
- **77%** Using the Learning Management System

Extract from Students' Access to and Use of Learning Materials (SAULM) Survey – conducted by UFS for USAf

Our approach – Enablers (2)

Start by doing what's necessary; then do what's possible; and suddenly you are doing the impossible.
Francis of Assisi

3. We adopted a **phased approach** to resuming LT activities. Shrink the change, smooth the path, find the "bright spots" (Heath & Heath).

4. We remained **agile** and employed **flexible timeframes** to allow students enough time to adapt to online learning.

5. Embedded in our approach is **support** for student learning, PG research a wellness through a variety of means; access to e-resources; and support and **capacity building** for academics re practicing flexible, human-centred pedagogy ("keep it simple").

6. **Teaming approach** to working our way through complexities to co-create solutions – student leaders were essential team members.

Our approach – Tracking progress

1. **Shifts in relationships between students and staff** – mutual growth of respect and understanding of challenges and appreciation of effort and hard work.

2. The importance of **continuous communication** and knowledge of student needs.

3. The importance of **risk taking, flexibility, and adaptability**.

4. The importance of relevance (online materials & activities) and **engaging students in learning**.

5. The **assessment** challenge - "continuous assessment ≠ continuously assessing"; integrity & online assessment.

6. Some **"aha" experiences** which will be taken forward.

Our approach – Tracking progress (students' views)

1. **Self-regulated learning and Developing Coping Mechanisms**
2. **Student-Lecturer Relationship Building**
3. **Importance of Lecturers Connecting with Students**
4. **Aspects of online learning worked well for students - pre recorded lectures; PowerPoint document with extra notes and audio attached; live interactive lectures – recreated a more normal classroom experience**
5. **Aspects of online LT worked less well – certain elements of face to face learning that students missed; Assessment challenges**
6. **Becoming prepared for online learning by doing online learning**
7. **The need for digital resources (should there be a national repository?) and conducive learning environments for online learning**
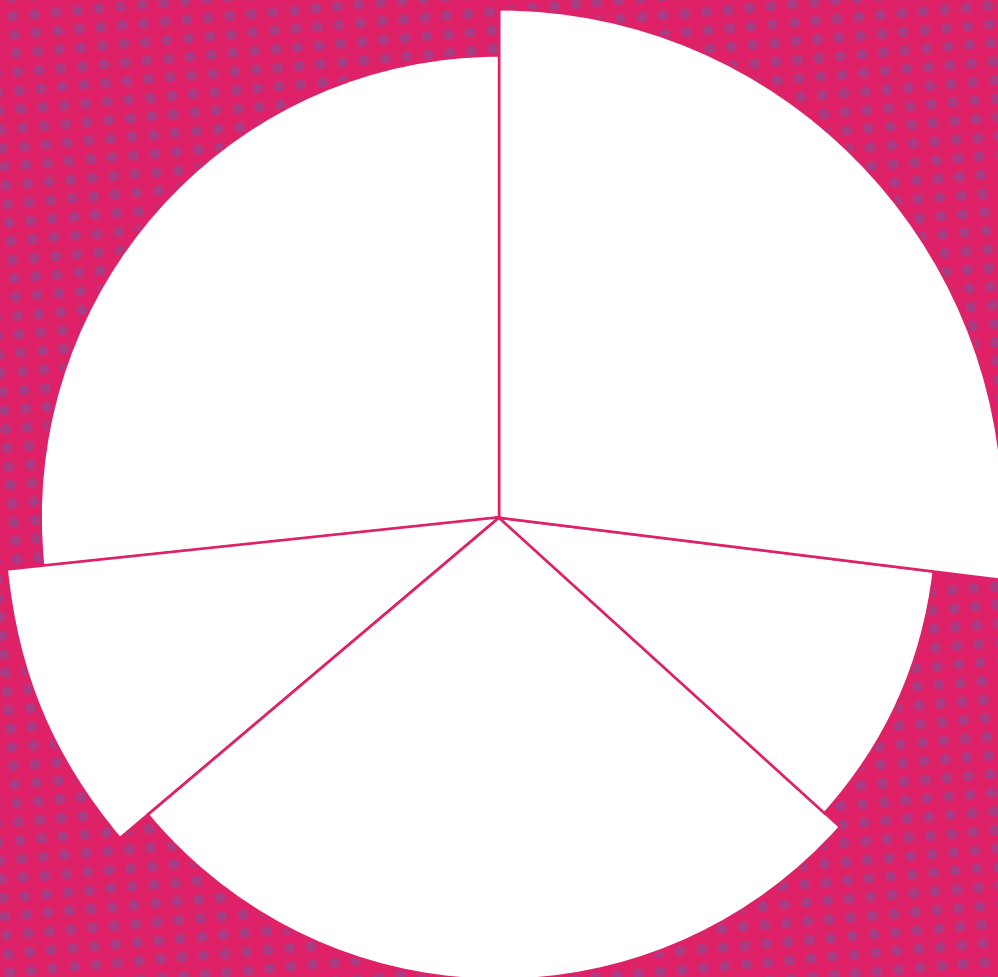
Our approach – Tracking progress

- "Silent" students – from 10% to <2% (n=360).
- The extent to which lecturers and students accepted the challenge of shifting to online LT and e-assessment, the courage it took to do this, and what the personal benefits were.

I am very impressed by the way that everyone came together in this pandemic to ensure the greater benefit for everyone as a whole. The amount of innovative effort that was put into action by the university in order to ensure that the learning cycle was not halted was truly exceptional, and it shows that when smart minds come together, there is no obstacle that cannot be overcome or worked around.

Change the World

mandela.ac.za

APPENDIX C

Enhancing student engagement in a digital learning environment

Kortext

Agenda

- Kortext – who we are!

- 2020 – what a year

- Hear from our HE partners

- Looking ahead – a blended future what students want!

- Kortext for engagement

- Kortext analytics

Kortext

Who we are

Purpose
To help educate the next generation of difference makers.

How
Providing the learning content students need via a smart learning platform that enables study, connection and collaboration.

The **leading supplier** of digital **textbooks in the UK**

Supporting millions of students at over 150 UK universities & **hundreds more overseas**

Used in over 80 countries around the world

Actively supporting learning 24/7

Kortext

Kortext global access – 2020/21

Kortext

What we do – more than

Partner with universities to support student attraction, progression and retention and improve outcomes.

How a partnership **improves student experience**:

Content available on any device at any time online and offline

Full range of study tools within the book

Complete integration into your institution's learning eco-system

Connecting students to their peers & teachers

K

108m
Pages viewed

245%
Increase in active users

1.5M
Study Hours

Kortext

2020 - What a year!

- COVID-19 greatly accelerated the **move to digital** content, embedded into the course, but also highlighted the issues with current textbook models.

- Clients already provisioned through Kortext were in a good position to react to this shift

- Kortext experienced a **quadrupling** of inbound requests during the freshers period!

- We **recruited 30 additional heads,** in the last couple of months to enhance our support for customers.

The Guardian

One in four students unable to access online learning during lockdown - survey

Tuesday 8 September 2020   **Full article**

400%
Increase in inbound requests*

Kortext

*September 2020 – January 2021

Hear from our HE

"Kortext's ability to work with **publishers** and design a **user-friendly reader** has been a key determinant in the decision-making process."

"eBooks not only delivers easy portability, but also **easy anytime, anywhere access**." View case study

"The brilliant analytics tab allows us to see exactly which students are engaging and in which parts of the text, allowing us to target the things that work best with the students, and identify students who are not engaging and provide early intervention." View case study

NSS results indicated that overall **student satisfaction was up 20%** since partnering with Kortext View case study

"Support from both the GOVTEK and Kortext teams have been superb. Their willingness to support and assist speaks to their ethos of customer service."

"Providing students engagement analytics for our academic staff together with other information is vital for them for early intervention in terms of non-continuation risk." View case study

"Over 99% of students registered with **96% of those active users** of the platform."

Students on average viewed **864 pages** to date and studied from the book **on average for 10 hours**. View case study

Kortext

Looking ahead...

- Teaching and learning continues to evolve as more universities digitise their own course materials and provide eTextbooks to students.

- This shift towards a more blended approach to course delivery is likely to accelerate.

- The recent Pearson/WonkHE UK survey indicated that over 80 per cent of students would like to see online lectures/tutorials, the provision of all core learning materials on the VLE, and digital check-ins with tutors to continue post pandemic.

- The key concern for Students is the lack of integration and engagement. They want more online academic / peer collaboration and interaction.

- Facilitating this is the key challenge for HE's delivering blended learning.

JISC

Forget on-campus vs online: the future is blended, say universities

Wednesday 4 November 2020   *Full article*

Students want better online interaction and collaboration

80%
Of students want all their core content available on the VLE*

*Pearson/WonkHE survey January 2021

Kortext

Kortext for engagement

- Kortext features full interoperability with the University data estate and connects to:

  - VLE - Blackboard/ Moodle / Canvas / Sakai/D2L
  - Library management systems (MARC records)
  - Teams
  - Reading List systems
  - Copyright work flow - DCS

- Kortext provides solutions for engagement:

  - Kortext analytics dashboard illustrates at a glance which students are engaged with a text and which are not facilitating effective student interventions and directs to the most useful texts.

  - Kortext on Microsoft Teams brings everybody and everything together in a single, familiar and trusted platform. This enables enhanced collaboration between lecturers and students to maximise engagement and learning outcomes.

  - Kortext apps offers online and offline access to a unique, personalised bookshelf for every student delivering various access points to maximise engagement
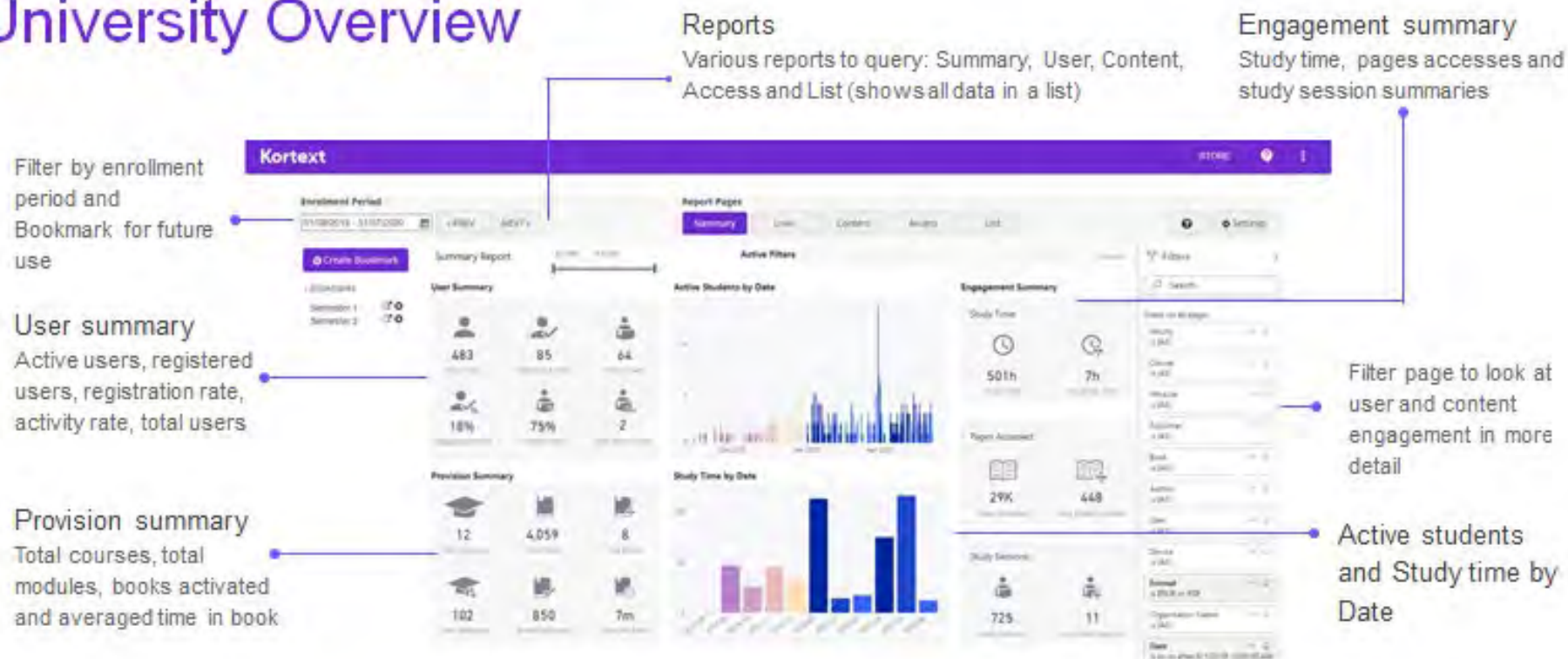
Kortext analytics

Thank you

Kortext