Covid-19 disruption of Inclusive lifelong learning through digital technologies in Ugandan Higher Education: policies and practices for university vulnerable groups

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ABSTRACT

The COVID-19 crisis has forced most governments around the world to close educational institutions in an attempt to contain the spread of the pandemic, impacting over 91% of the world's student population according to UNESCO. Uganda is among the countries where schools have been closed for at least 2 years. Uganda subscribes to the UN's 2030 sustainable development goal (SDG) 4 which is grounded on notions of equity and fairness. The SDG 4 agenda: 'Ensures inclusive and equitable quality education and promotes lifelong learning opportunities for all'. Similarly, Uganda's Education Sector Strategic Plan 2018-2020 stipulates delivery of equitable, relevant and quality education for all. Notably in Uganda, with 42 million people (UBOS 2020) in lock down and mostly confined in their homes, digital technologies are becoming a necessity, as they become one of the main ways to access education, but also one remaining vectors for social interactions to take place. For instance, the 2019 communication sector report by the Uganda Communications Commission shows that the country's internet penetration stands at 37.9% with over 23 million internet users, who mostly use mobile phones. According to the same report, mobile internet subscription stood at between 14.3 to 15.2 million persons out of the 42 million Ugandans. Meanwhile about 1.1 million to 1.4 million Ugandans have actively subscribed to pay-tv services. This clearly shows the digital gap as of 2020, given that a large proportion of the population (estimated at 62-96%) does not have access to the internet or pay-tv. The present article aims to demonstrate that in the current COVID-19 crisis, much as digital technologies are helping to reach wider audiences globally, Uganda, like other Sub-Saharan African countries, still faces several challenges which directly or indirectly affect lifelong learning. Our hypothesis is that some of the most vulnerable students from Universities living in rural communities, people living with disability are the most difficult to reach if ICTS serve as the main instrument for promoting lifelong learning. A survey of a convenient sample of 350 Ugandan students from various socioeconomic backgrounds was conducted. Preliminary results show that despite the fact that digital technologies have enabled the closing of the gap of continued access to lifelong learning during the COVID-19 pandemic in Uganda, there are still existing challenges in implementing Inclusive lifelong learning such as mobile phones, unstable electricity, poor infrastructure and accessing the lowest technology in order to close the educational gap.

Keywords*: coronavirus, lifelong learning, inclusive and equitable, digital technologies, lockdown*

1 Introduction

The COVID-19 is the infectious disease caused by the most recently discovered coronavirus. According to the World Health Organization (WHO, 2020), this new virus and its pathological characteristics were unknown before the outbreak began in Wuhan, China, in December 2019. COVID-19 pandemic has affected all countries in the world, with severe impacts on society, particularly vulnerable communities and overwhelmed healthcare systems and the education sector. Given its unusual characteristics, the pandemic has caused widespread social and economic disruption and dramatic re-shaping of the world. Furthermore, the pandemic has caused the temporary closure of several educational institutions ranging from kindergarten to universities in order to mitigate the spread of the novel coronavirus (UNESCO 2020). To note is that the extent to which the current pandemic is a social calamity has been well documented by several scholars. For instance, according to a survey report by EdTech Hub, (2020) there has been widespread school closure across Sub-Saharan Africa in response to the pandemic and this closure was seen as an appropriate and essential decision. In the light of school closure, the only way out for educational institutions was to embrace online distance learning or home learning as an alternative to face-to face instructions (OECD 2020). The online distance learning is known to have been underutilized in the past by developing countries (Zalat et al 2021) but however COVID-19 pandemic has obliged the entire world to introduce eLearning as a way out for all educational institutions (ibid). In Uganda, COVID-19 challenges have obliged different departments and Faculties within Universities to design online courses they previously taught face to face (Ali, 2020; Dhawan, 2020; Rapanta, Botturi, Goodyear, & Guardia, 2020). However the concern with this novel way of instruction resides in the fact that the effectiveness of online learning might have been hindered, in some cases, by the lack of basic digital skills among certain students and Lecturers, making them unprepared to adapt to the new situation so abruptly (OECD, 2020).The present study therefore sought to demonstrate that in the current COVID-19 crisis, much as digital technologies are helping to reach wider audiences globally, Uganda, like other Sub-Saharan African countries, still faces several challenges which directly or indirectly affect lifelong learning.

Likewise, the most vulnerable students from Universities living in rural communities, people living with disability are the most difficult to reach if ICTS serve as the main instrument for promoting lifelong learning/online teaching during the coronavirus disease 2019 pandemic. Additionally, a report on the survey carried out by EdTech experts in 2020 regarding the impact of the Covid-19 pandemic on education in Africa found out that a lack of access to technology was considered to be the biggest barrier for learning during the current pandemic together with school closures (EdTech Hub, 2020). The survey also found out that learners in rural communities were those most likely to be disadvantaged as a result (ibid). The most cited limitation was the lack of availability and affordability of connectivity (ibid). Similarly, the study revealed that Educational TV and radio were seen as the most important technologies for sustaining learning for students at the primary level. At the secondary level, online learning was considered to be the most important. Some 85% of respondents anticipated that the current crisis would lead to more widespread use of technology in education in the future. However, they also noted that this would lead to significant challenges for the most marginalized and may increase inequality (ibid).Of interest is that the pandemic stimulated the growth of online educational activities so that there would be no interruption to education. Needless to say, the Covid-19 pandemic has also exposed the many inadequacies and inequities in our education systems – from access to the broadband and computers needed for lifelong learning. According to the UNICEF press release 2021, The COVID-19 pandemic has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more than 190 countries. For instance, according to UNICEF report 2020, during the first coronavirus disease (COVID-19) lockdown in March 2020, over 15 million learners were sent home in Uganda. This implied that about 15 million learners were affected by the lockdown. Above all, this also meant that the present health crisis is aggravating the pre-existing education disparities by reducing the opportunities for many of the most vulnerable children, youth, and adults – those living in poor or rural areas, girls, refugees, persons with disabilities and forcibly displaced persons – to continue their learning (ibid). On the other hand, the World Bank's Education GP teams are seemingly providing hope by support to affected countries along three phases of the COVID19 response: I. Coping; ii. Managing Continuity; and, iii. Improvement and Acceleration. Between March and May 2020, most efforts by governments and WB teams were devoted to Coping (Phase 1), especially supporting learning continuity and parental engagement at home. Despite efforts to reach remote and vulnerable children, it is a known fact that the education engagement in many countries has been very unequal, and the large pre-pandemic inequality of opportunity is widening. However, Uganda has reopened all the universities and the institutions are slowly recovering.

2.Theoretical considerations

The advent of Covid-19 crisis, has forced Institutions of higher learning to move online to provide ongoing learning and above all, to embraced lifelong learning (LLL) – both as a concept and in its many practical manifestations (UNESCO 2020). To date, LLL is becoming a staple of education policy discourse around the globe (ibid). There is no doubt that universities have a vital role to play in promoting LLL, and in recent decades the international education community has discussed the implications of lifelong learning for higher education (ibid). Therefore, the vital need for lifelong learning has been demonstrated by COVID-19 crisis as underscored by UNESCO (2020).What theories, champions and institutions of lifelong learning could not accomplish over decades, the pandemic made possible almost immediately: integrating all education in a lifelong learning perspective (ibid),As underscored by Ossiannilsson (2020), in an age of digitalization and information technology, emergencies such as Covid-19 are no excuse to stop continuous learning. He further contended that the discourse on the "new normal" after COVID -19 should be about change, resilience, rethinking, reorientation and sustainability (ibid). To him a sustainable society requires access to successful strategies, agile and flexible leadership, digital platforms, partnerships and the ability to respond to rapid change, promote flexibility in learning and support to students (ibid).Likewise, the UNESCO Institute for Lifelong Learning,(2020) contribution to the UNESCO International Commission on the Futures of Education report sets out a future-focused vision of education and demands a major shift towards a culture of lifelong learning by 2050. Similarly, the report argues that creating a global culture of lifelong learning will be key to addressing the challenges faced by humanity, from the climate crisis to technological and demographic change, not to mention those posed by the [Coronavirus Disease 2019] COVID-19 pandemic and the inequalities it has exacerbated. The report reflects on the potential contribution of lifelong learning both in transforming the field of education and in creating a more sustainable, healthy and inclusive future, and presents a compelling vision for lifelong learning and the values and principles that must underpin it (ibid). Furthermore, as argued by Budd Hall and Rajesh Tandon the UNESCO Co-Chairs on Community-based Research & Social Responsibility of Higher Education, in the post-pandemic world, institutions of higher education, including those in Uganda, must find holistic approaches to re-connect with society around them, integrating a lifelong learning approach into their core missions of teaching, research and service, (UNESCO 2020). In the same vein, Per Magnusson a Senior Programme Manager, Swedish International Development Cooperation Agency (SIDA), and also a member of the UIL Governing Board indicated that while the long-term impact of COVID-19 on education will be dramatic, the future will be much more precarious if we do not focus on building systems for lifelong learning that safeguard quality and inclusiveness (UNESCO 2020).

In addition, the UNESCO (2020) suggests that the narrative of lifelong learning begins with a simple proposition: learning takes several forms, including formal, non-formal and informal learning. Learning happens throughout life, in all aspects of life, and from all ways of living life (work, leisure, community service, family, etc.). Learning is life-long, life-wide and life-deep. Furthermore, the fourth International Conference on Adult Education (CONFINTEA IV), in Paris in 1985, recognized the 'fundamental right of each and every individual to education, and that lifelong education is becoming an absolute requirement for social, economic, scientific and technological development in the modern world'. The declaration of the conferences noted that the right to learning is: the right to read and write; the right to question and analyze; the right to imagine and create, the right to read one's own world and to write history; the right to have access to educational resources; the right to develop individual and collective skills. This implies that Lifelong learning is critical in addressing global educational issues and challenges. Lifelong learning from cradle to grave is a philosophy, a conceptual framework and an organizing principle of all forms of education, based on inclusive, emancipatory, humanistic and democratic values. Likewise, UNESCO, in 2015, urged Member States to understand education as an important public good, essential to the achievement of the Sustainable Development Goals:

> Education must also change … new approaches to learning for greater justice, social equity and global solidarity. Education must be about learning to live on a planet under pressure. It must be about cultural literacy, on the basis of respect and equal dignity, helping to weave together the social, economic and environmental dimensions of sustainable development.

The concept of 'lifelong education', therefore implies that learning is not confined to childhood or to the classroom but takes place throughout life and in a variety of situations (Carlsen, 2013, p. 311).The vital need for lifelong learning has been demonstrated by COVID-19 crisis. A prominent argument for lifelong learning is that it promotes social inclusion.

3. Methodology

A structured survey was created and widely distributed to the Students of Makerere University Business School through students email and WhatsApp accounts. Data collection was done between February and March 2022. 300 students responded to the questionnaire. They came from courses such as Bachelor of International Business (BIB), Bachelor of Travel and Tourism Management (BTTM) and Bachelor of Catering and Hospitality Management (BCHM). The survey had 5 demographic questions and 5 open-ended questions. Five demographic characteristics of the respondents were considered in this study and these were gender, age, level of education, residence, type of institution. Some of the key questions asked are as follows: How have various technologies such as e-learning plate form (Moodle, podcasts,) and social networking assisted your online learning education during covid-19 lockdown? What technologies have you been exposed to during your online learning? What are the challenges that you might have faced while using technologies for your online learning? What opportunities do you see in using online technologies for effective learning? Can you suggest some of the emerging technologies that can improve the effectiveness of learning in African Higher Education?

4. Findings and Discussions

Our research study made us to work with 100 participants whose ages ranged from 20 to 29-years of age and were all were undergraduate students at the Public Institution (71 %) of the students were urban dwellers, while (29 %) were from a rural setting and this had implications of poor network coverage, expensive data costs, inconveniences in attendance of learning, power shortage, accessibility to the internet, high costs for the use of the internet, no stable network. In addition, the majority of the respondents were males (57 %) and 43 female (43%) student offering BIB and BTTM and BCH.

Our findings from the open ended questions demonstrated that the various digital learning platforms and social networking assisted students' online learning education during covid-19 lockdown. All the respondents were of the view that digital platforms have made it easier to study for students across the country. Accessibility of education materials through the use of social networks also enabled them and their colleagues to keep up with their academic journey while also enabling them to continue amidst tough times. They (the respondents) further added that the use of digital learning facilitated online discussion and tests. Digital learning made it easy for the students to easily interact with lecturers and ask them questions especially for those who have low confidence levels. Furthermore, the use of digital learning encouraged researching online. Some respondents testified that they got experience on how to use most devices and that they can design documents, for example a flier. They further indicated that they have been exposed and adapted to online classes through using zoom for studies, they also got familiar with institution's established online platform for doing exams. Through digital learning, a number of the respondents were able to finish the semester by online way of learning. It also helped them to keep reading and revising for exams in addition to continuing their studies regardless of the pandemic situation. Online studying also gave them a chance to exercise more about computer literacy in which they testified to have acquired very many skills.Furthemore, the respondents found that the digital learning helped them to learn to cope with online learning and learn how to use various technologies and operate various applications while studying online, for instance it was easy for them to access available ready materials from anywhere in Uganda ,it increased student engagement, kept them updated and continuing to learn, facilitated personalized learning and helped the lecturers to improve their lesson plans.

Adding to the above arguments, it was interesting to note that the students indicated that they have been exposed to technologies during their online learning. These technologies ranged from Zoom, telegram, and e-learning sites, Platforms such as Video conferencing, telecommunication tools such as google meet and use of projectors and smart screens. The argued that they have also been exposed to online learning platforms such as the zoom meeting application, Mubsep, automated paper, real time paper, the e Learning, Video assisted learning, social media, Mobile technology, Cloud computing, Online exams and lectures. Additionally, the findings indicated that the respondents have been using my smartphone, modems, google forms, Teams, Learning management system and video telephony. This particular findings points to the fact that digital technologies enabled lifelong learning to the university students who easily accessed the gadgets.

Another important finding pointed to the fact that despite the fact that learners had access to ICT equipment, most especially those who lived in the urban center during the lockdown, they were faced with inevitable challenges and barriers while using technologies for their online learning. The findings pointed to the following challenges which might have most likely impeded lifelong learning during lockdown. Poor network coverage, buffering, expensive data costs, inconveniences in attendance of learning, power shortage. In addition, the respondents had difficulties with accessibility to the internet, high costs for the use of the internet. Some of them found it hard to find stable network spots, some of them faced challenges of digital illiteracy and could use these devices, others were experiencing high costs of data which made it hard to access some lectures. Likewise, breakdown of mubsep was identified in addition to lack of electricity in the villages and the latter increased costs of MBs and data challenges. Some respondent indicated that it was quite easy to get distracted, others indicated missing marks for some exams among others challenges, poor network connection, lack of data, poor audio and video quality, Internet problem due to insufficient data, slow network connection. In addition, some respondents alluded to the fact that they had challenges of using a laptop to study for the first time, that they experienced loss of data and information due to network. That it was costly to buy internet bundles, that they had challenges with compatibility with older smartphone. They also pointed to the poor network in some rural areas and to that fact that most Ugandans in rural areas are computer illiterate.

In as far as the opportunities in using online technologies for effective lifelong learning exist, the findings underscored among other technologies the following,: the use of remote classes via satellite, Use of e-learning sites, economic growth for Uganda as a country, improved education and knowledge delivery experiences, connectivity which will enable Uganda benchmark on or against economies that have achieved such a level excellent online technologies are used, people get well versed with learning about different platforms and these technologies have enabled smooth communication between students and lecturers, e-marketing, Online shopping. Additional, the respondents underlined the fact that it is easy to teach online, that technologies enable work to be accessed easily. In addition, the findings highlighted the fact that Students who stay at a distance can easily learn online without first travelling. They pointed to the convenience of attending lectures online in case as traffic jam impedes attending classes. Although computer literacy was highly advocated for, the respondents alluded to the fact that technologies enables one to saves more resources; money, transport, because they can be done alongside doing other things at home or at office. They also accentuated the fact that the technologies help to increase the student-teacher interaction which gives a free learning environment. For instance some students indicated that technology eases learning in a way that physical presence is not essential in the actual classroom hence people who are in far locations can also learn at their different locations. It helps learners get well vast with using various technologies that can be helpful in the working environment. It is time saving and cost saving in the long run easy for management. The on line technologies enabled teacher's to better reach students who are further from the average within their classroom. Technologies expose learners to new opportunities. The technologies enable acquisition of computer based skills, faster and quality studies.

It is interesting to note that the students pointed to some of the emerging technologies that can improve the effectiveness of lifelong learning in African Higher Education. They emphasized Zoom, Satellite service learning for remote areas ,Virtual reality in teaching and learning, Cloud computing this could be used through saving databases in the cloud to improve students data loss, Teleconferencing and live streaming of classes, eLearning, Artificial intelligence Google meet, google duo Online marketing, Virtual reality ,Live streaming ,Artificial intelligence Improving signal masts strength, reducing on data prices ,Use of personal computers , desktops , Laptops, Mobile phones, Wi-Fi routers, Zoom, Teams, Google meetings, e-learning platforms. Some respondents claimed that Uganda has so far good technologies for online studying, and therefore they recommended improvement in the network coverage to provide a chance to all the people in the whole country.

Conclusion

From the foregone findings and discussions, it is clear that the preliminary results show that despite the fact that digital technologies have enabled the closing of the gap of continued access to lifelong learning during the COVID-19 pandemic in Uganda, there are still existing challenges in implementing Inclusive lifelong learning such as mobile phones, unstable electricity, poor infrastructure and coverage and accessing the lowest technology and cheapest internet in order to close the educational gap.

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