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CHAPTER 8

PERCEPTIONS OF FACULTY OFFICIALS ON ONLINE LEARNING IN KENYAN INSTITUTIONS OF HIGHER EDUCATION DURING THE COVID-19 PANDEMIC: A RAPID QUALITATIVE STUDY

Stephen Okumu Ombere and
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ABSTRACT

Due to the Coronavirus 2019 (COVID-19) pandemic, education has been disrupted right from kindergarten to University. Globally, states are advocating for online learning. The COVID-19 pandemic had led to the closure of universities and it was not clear how long this would last. e-Learning was crucial. Lecturers were asked to complete their syllabuses and continue to teach and administer tests remotely. So far, there is a dearth of information on how Kenya's higher education responded to the pandemic through online learning. This qualitative study utilized online platforms (zoom and Skype) for interviews. This study employed a constructivist approach to explore the faculty officials' perception of online learning in Kenya's institutions of higher education. Approximately 45 faculty officials from public universities were involved in this study. The study was carried out in three public universities in Western Kenya. The participants argued that online education was beneficial and primarily promoted online research and enabled them to connect with other practitioners in the

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global community. There were challenges associated with online learning for instance unreliable internet. This study's results are hoped to inform the ministry of education and higher learning policies on making online effective and efficient to both the students and the lecturers. This will also be a fairer spring-ball for Kenya toward the realization of Vision 2030.

Keywords: COVID-19; distance education; e-learning; higher education; online learning; rapid qualitative; western Kenya

INTRODUCTION

Globally, the spread of novel coronavirus COVID-19 has led to profound social interaction and organizational changes, and the education sector has not been immune (Muftahu, 2020; Murphy, 2020). Without question, the global spread of COVID-19 posed a challenge to the higher education landscape at a magnitude that has not witnessed since the emergence of technology-supported and online instruction (Liguori & Winkler, 2020; Murphy, 2020; Toquero, 2020). COVID-19 has considerably re-defined how higher education is delivered worldwide (Almahasees et al., 2021). Bozkurt et al. (2020) estimated that over 1.5 billion students of all ages, nearly 90% of the global student population, have experienced a disruption in their education. In response to the COVID-19 pandemic, the global higher education institutions changed how they meet the students' needs, education staff, and professionals. In particular, universities, college campuses, and higher education institutions canceled classes and closed their doors in response to the COVID-19 pandemic (Hodge, 2020; Muftahu, 2020; Shahzad et al., 2020). Universities in developing African countries are more vulnerable to the consequences of the COVID-19 pandemic (Tamrat & Teferra, 2020). According to the International Association of Universities (IAU) 2020 report, developing African universities are still attempting to transform and improve their higher education system.

Online learning is not a new development in the field of education. According to Sherry in her study entitled "Issues in Distance Learning," it has existed for more than a century and began in European correspondence courses. It is a field of education that allows students to participate in classes while never setting foot inside a classroom (Sherry, 1995). There has been a drastic change in how teaching and learning happen while learners are physically out of schools and separated from their teachers and co-learners in such a critical time. Nevertheless, higher education institutions worldwide are shifting to online learning or distance education programs due to the COVID-19 pandemic (Demuyakor, 2020; Toquero, 2020). Notably, e-learning is defined as using online platform technologies and the internet to enhance learning and provide users with access to online services and services (Ehlers & Pawlowski, 2006; Pham et al., 2019).

e-Learning is also known as online learning and distance learning is an internet-enabled teaching method (Dwidienawati et al., 2020). e-Learning is a formal approach to learning where students and lecturers interact indirectly using internet-based infrastructure (Pham et al., 2018, 2019). e-Learning is defined as "learning

experiences in synchronous or asynchronous environments using different devices (e.g., mobile phones, laptops, etc.) with internet access” (Huang et al., 2020).

There are many platforms or tools that educators and learners use in online learning. These technologies are Zoom, WhatsApp.com, Skype.com, Youtube.com, and Google classroom (edu.google.com). The application of these technologies in education influences online learning and accessibilities of learning and teaching materials through the internet (Joseph & Mkulu, 2020). Huang et al. (2020) argue that with technology advancement, learning can be maximized to provide a high-quality course that gives students options of time, place, and pace and experiencing different learning experiences. However, there is a need to assess the credibility of course content offered to students online especially during emergencies like the pandemic.

A study by Stec et al. (2020) indicated that online teaching has three main approaches: enhanced, blended learning, and online. Enhanced learning uses the intensive use of technology to ensure innovative and interactive instruction. Blended learning mixes both face-to-face and online education. The online approach indicates that the course content is delivered online. Online education is convenient for students, where they can access online materials for 24 hours (Stern, 2020). Online education turns education into student-centered, where students participate in the learning process, and teachers work as supervisors and guides for students (Al-Salman & Haider, 2021). Most academic heads promoted online education as a solution to the COVID-19 crisis (UNESCO, 2020). However, it is necessary to acknowledge that online learning cannot completely replace face-to-face delivery (Demuyakor, 2020; Khalili, 2020).

Due to the COVID-19 crisis, more prominent universities gradually moved their programs online and did away with face-to-face delivery (Bao, 2020). Top universities globally such as Tsinghua, Peking University, Harvard, MIT, Yale, Oxford, and Cambridge have moved in this direction too (Bao, 2020; Picciano, 2017). Bao (2020) and Siripongdee et al. (2020) argued that going entirely online in higher education requires significant planning and investments from the government and other sectors of higher learning institutions to take into consideration lecturers’ and students’ needs. To achieve the maximum benefits from e-Learning courses, both students and lecturers should explain their roles and be instructed to show commitment (Abdelmola et al., 2021). Lecturers are required to use and explore online education possibilities. On the other hand, due to some lecturers’ lack of knowledge and expertise in online education delivery along with the high level of stress among students, there are concerns that poor execution of online education delivery may cause long-term negative impacts on online education as a teaching methodology (Khalili, 2020; Michael, 2020).

The Effect of the COVID-19 Pandemic on Higher Education Institutions in Kenya & “e-Learning”

History teaches us that crises re-shape society. While it is still uncertain how COVID-19 will re-shape our society, the global pandemic is encouraging and accelerating innovation and advancement, especially in the digital sphere (Kang, 2021).

The outbreak of coronavirus (COVID-19) has brought many changes across several industries including the education sector. One of these changes is that the physical classroom has begun to lose its value as the place of teaching and learning (Joseph & Mkulu, 2020). Due to COVID-19, the global education system is transforming and adapting to new challenges in light of the COVID-19 pandemic, thereby putting the conventional teaching and learning practices to the test. However, switching to the different forms of online education alone is enough to speculate that the future of education seems radically different from what it has been for decades. This study also aims to assess the faculty officials' perceptions of the effectiveness and credibility of online learning in higher education in public universities of Kenya.

Notably, the past two decades have witnessed a heightened demand for higher education in Kenya, resulting in an increase in the number of Institutions of Higher Learning (IHLs) in the country. By November 2017, there were 31 public universities with 6 affiliate colleges, 18 private universities with 5 affiliate colleges, and 14 universities in both categories operating with letters of interim authority (Commission of University Education, 2017). However, the increased number of universities has not been sufficient to satisfy the country's high demand for higher education, hence widening the educational access gap (Kibuku et al., 2020). Kenya confirmed its first case of COVID-19 on March 13th, 2020 and the cases have continued to rise and spread across the country steadily. The government of the Republic of Kenya abruptly closed all schools and higher institutions between 16th and 20th March, 2020 (Ngwacho, 2020). Education is one of the vital requirements for attaining Kenya's Vision 2030 and a springboard to the "Big 4 agenda." COVID-19 disrupted nearly over 17 million learners however, learning continued in synchronous and asynchronous modes to cope with the termly and semester requirements (Kathula, 2020). The major concern of the distance learning method is the quality and the effectiveness of the learning process. Moreover, there is a need to address some of the systemic practices within higher education that pose a persistent barrier to a deeper and more productive engagement with digitalization; universities in Kenya will not realize the potential of the digital University.

The general objective of this chapter therefore was to determine the perceptions of faculty officials the effectiveness and credibility of online learning in higher education in public universities of Kenya. Specifically, this chapter aimed to find out the credibility of course content for online teaching; to establish challenges that lecturers encountered during online teaching; and to describe the possible solutions to lecturers' challenges during online teaching.

METHODOLOGY

This chapter is based on a rapid qualitative study. The study population was approximately 45 faculty officials from the purposively selected three public universities in western Kenya. Faculty officials included the dean, head of departments, school examinations coordinators, departmental examinations, and timetabling officers. Interviews and informal narratives were conducted with the

selected deans from the faculty of social sciences. Faculty officials were drawn from schools of social sciences. Inclusion criteria were that one had to have taught in the university for the last five years, must have served as examinations coordinator in the department and school for at least two years, and must be ahead of the department or dean in social sciences. Equal chances were given to both male and female participants meeting the inclusion criteria. The study was conducted through online interviews where we captured narratives from the participants. The study utilized video conferencing applications, such as Zoom and Skype. Four online group discussions were conducted during the closure of universities in Kenya to control the spread of COVID-19 between September 15th and November 15th 2020.

Qualitative research deals with socially constructed realities and complex qualities. Therefore, this study utilized grand-tour questions to get the larger experience, describe and interpret how lecturers who reported to the deans at University (social setting) socially construct the use of technology in learning (e-learning). [Spradley \(2016\)](#) distinguishes between “grand-tour” questions and “mini-tour” questions. Mini-tour questions focus on more specific details or smaller units of experience. Given the seniority of the participants, grand-tour questions (questions asked, not in a simple statement, but with repeated phrases, expanding on the basic question; questions that lead to rich descriptions) were employed in this study. The responses were based on the participants’ experiences on course delivery in their respective faculties and schools depending on what lecturers reported to them. Specifically, participants were asked what the effectiveness and credibility of course content for online teaching were. What challenges did lecturers encounter during online teaching? What changes in higher education would be permanent post-COVID-19? What could be the possible solutions to lecturers’ challenges during online teaching? Initial contacts were made earlier before this study. The informed consent forms were sent to the potential participants in this study to inform them about the nature of the study. No participant declined or dropped out of the study.

DATA ANALYSIS AND PRESENTATION

Two main approaches to qualitative data analysis were used: (a) the hermeneutic analysis of the data and (b) content analysis of the interviews ([Braun & Clarke, 2013](#)). The first author did the transcriptions using a computer-aided transcription software (F5 transcription-free). The recorded discussions were transcribed verbatim in English by the first author. Data analysis began while the research was in progress. All authors participated actively in the analysis. We took note of emerging themes and how they developed in the course of the research and later discussed them for corroboration during the analysis. Coding was done manually – no software was used. The authors repeatedly read through the transcripts to identify and list inductive codes. After coding, the authors agreed on the key themes presented here. The findings are presented here in textual descriptions and illustrations using verbatim quotes.

FINDINGS

The section systematically presents findings on key issues that emerged from the objectives of this study.

Course Design and the Credibility of Course Content for Online Teaching

There has been a sudden shift in learning due to a sudden COVID-19 outbreak. This study showed that higher learning institutions in Kenya did not have adequate time to adjust to the new teaching platforms. The designs for online classes were done in a hurry and this might have been the main factor that affected lecturers–students’ interaction in the online platform. It was also commonly mentioned by the participants in this study that despite shaky course designs, control measures prevailed which were put in place to ensure that course content matched the face-to-face learning methods. The lecturers needed to upload the course content in the various learners’ management systems for access by the students.

For instance,

We know that this COVID-19 caught us off-guard and a majority of our higher learning institutions did not have adequate time to prepare for online learning. The course designs were prepared in a hurry and it posed a challenge to the learners and facilitators interactions. However, almost all universities have converted face-to-face notes into online materials for online lectures. (Participant 1, September 2020)

Another participant added that:

We are trying to ensure that the online course content matches what is in the original course programmes. This varies from one University to another; they have different control measures of quality of online materials. (Participant 2, September 2020)

However, 33 of the participants expressed that all course contents were credible because they were academic programmes developed and mounted by universities after approval from the commission for university education (CUE) in Kenya. Some participants expressed their fear on the quality of instruction offered for the science and technology programmes. This is since these programmes needed students to attend laboratory sessions for practicals.

Even though relevant authorities accredit all university courses, online learning might not be credible for science and technology programmes that need a laboratory for practicals. Lecturers record themselves describing a procedure and post it to students to learn. This cannot be very credible. (Participant 3, November 2020)

Challenges That Lecturers Encountered During Online Teaching

Online learning has allowed for the advancement of education to reach more people through technology, but it also minimizes in-person experiences. Evidence from discussion with the deans in this rapid qualitative study shows that most lecturers lacked sufficient knowledge of utilizing information technology to deliver online lectures and their understanding of online teaching was relatively poor. To counter such challenges, the universities emphasize impact rather than inputs. This includes empowering academic and professional staff by offering short-time

training on how to conduct online lectures effectively. After such training, online lectures were more digitalized as lecturers could operate from home and could easily assess students without difficulties.

For instance,

COVID-19 got most institutions off-guard, so even monitoring the quality of online lectures become problematic. Most lecturers were not conversant with this online thing. This was very big challenge. But the universities continuously trained lecturers on how to deliver an effective online lecture. (FGD Participant 22, September 2020)

Training on how to deliver online lectures helped us. We can now do online lectures at home without necessarily travelling to the University. (FGD Participant 01, November 2020)

The respondents commonly mentioned a need to invest in Information and Communication Technology (ICT) for a practical online lecture. Most higher learning institutions in Kenya adopted online teaching. Furthermore, delivering a lesson online may be hindered by system jams. Additionally, it emerged that the universities were partnering with internet providers such as the main mobile network service provider (Safaricom) to ensure that students and the University get cheap, fast, and reliable internet.

There are a lot of system jams, few licenses for students to access some of the online platforms and it is also very tedious to know which student plagiarized their assignments. But the universities are investing in anti-plagiarism software and partnering with internet providers to sort the problem of internet jams. COVID-19 has changed things. (FGD Participant 29, September 2020)

The overall objective of learning programs during pandemic outbreaks is to ensure that the transmissibility of the COVID-19 virus is reduced within the population and continuity of learning. Online delivery of instruction in developed countries is more effective, despite a few challenges, because of better educational and technological resources at their disposal.

Findings from this study indicate that the unavailability of resources facilitating online teaching and learning was a major concern to the lecturers in the three public universities. The universities did not have properly running online communication tools; for example, the universities had limited student access licenses to online library materials. Additionally, the lack of access to high-speed broadband or digital devices was also reported to undermine online learning. For instance

If we have such slow internet, it isn't easy to conduct online teaching effectively. I believe strong internet and good license for many users will make e-learning effective, But I know the University is doing something on the same. (FGD Participant 19, November 2020)

The Possible Solutions to Lecturers' Challenges During Online Teaching

To counter challenges faced by lecturers during online lectures, most of the study participants mentioned that the universities were offering free online training to all lecturers to ensure that they have basic knowledge and skills on how to conduct an online class effectively. Participants mentioned that one way to prepare for uncertainties such as the COVID-19 pandemic is for all universities to have a budgetary allocation for technological investment in online teaching.

Corona has taught us a lot, students and even lecturers complain about low internet coverage. We can still do more in terms of investing in internet and other technologies that will allow us to conduct online teaching effectively. (FGD Participant 12, September 2020)

There is need for budgetary allocation for investment in technology. This will be a way to preparing for any uncertainties in future. (FGD Participant 08, November 2020)

DISCUSSION

In this section, the key themes are discussed.

One of the main findings from this study was the nature of course designs and the credibility of the course contents. Course design is one of the three fundamental elements that could impact the satisfaction and outcome of students in the e-learning environment (Moore, 2016). The cognitive information processing model stipulates that students learn better when the course design and teaching method matches their learning style, implying that if the course could be designed to fit a wider range of students' learning styles, they would be more satisfied since it is likely that they will gain a better outcome. According to Almaiah and Alyoussef (2019), if well planned, course design increasing the satisfaction of pupils with the system. However, if the course is not designed effectively then it might lead to low usage of e-learning platforms by the teachers and students (Almaiah & Alyoussef, 2019). On the other hand, if the course is designed effectively then it will lead to higher acceptance of e-learning system by the students and their performance also increases (Sabbah Khan & Yildiz, 2020). However, technology makes it more feasible to deliver a wider range of pedagogies with the ever more sophisticated systems like Blackboard and Canvas (Chu et al., 2021). According to previous studies, one of the major roles of an online course instructor is to implement and deliver the course content to students (Chu et al., 2021). Therefore, a functional online course should have different control measures such as specific aims, assignments, evaluations, content, methods of interaction, and structure (Darabi et al., 2006). Such control measures are important just as the cognitive information processing model stipulates that students learn better when the course design and teaching method match their learning style, implying that if the course could be designed to fit a wider range of students' learning styles, they would be more satisfied since it is likely that they will gain a better outcome (Chu et al., 2021).

The study also reported that inadequate lecturers' skills on ICT, impacted on the online learning in higher learning institutions during the COVID-19. Lecturers' experience has a significant impact on the effectiveness of online education (Martin et al., 2019). Studies have shown that the success of online education is the function of the virtual techniques, the ability to engage and increase the participation of the students, and the ability of effective communication (Martin et al., 2019). Niemi and Kousa (2020) fairly pointed out that both teachers and students are in a situation where digital academic experience has to be acknowledged as the biggest limitation in the online teaching process due to the COVID-19 crisis. Just like as the same scenario in Kenya' universities that participated in this rapid qualitative study, other studies (Chu et al., 2021; Langset et al., 2018)

asserted that the adoption of technology might fail because in many cases, it is imposed on the users (lecturers), and they are sometimes excluded from the planning process as well as receiving inadequate training. The findings from this study also corroborate Mpungose (2020) and Khoza (2019) findings which showed how imposition in a context where lecturers become frustrated and anxious, resist and ignore the use of adopted technology (such as the zoom) and become rebellious against the system. The lack of online teaching strategies makes the lecturers demotivated to use such online teaching platforms effectively (Mpungose, 2021).

As early as the 2000s, institutions of higher education in the Sub-Saharan continent had started conceiving possibilities of improving higher education through ICTs (Juma, 2002). Successful investment and implementation of ICT programs in the educational systems in Africa at that time could have significantly curtailed the impacts of the subsequent epidemics and current COVID-19 that have ravaged educational programs in Sub-Saharan Africa (Ayega, 2020). The findings concur with recent findings on digitalization in teaching and education in the context of COVID-19 in Kenya which indicated that, Kenya's education infrastructure does not have the capacity to effectively deliver and sustain online teaching and learning, particularly for those in rural areas and also for vulnerable and marginalized students (Barasa, 2021). For instance, the radio and television lessons introduced during the pandemic were not designed to meet the varied learning needs of students (Barasa, 2021). Moreover, previous studies have also shown that e-learning is dependent on technology: the internet and computers, which students may not have access to, and interruptions or other system errors may appear during courses (Coman et al., 2020). Online learning has become popular because of its potential for providing more flexible access to content and instruction at any time, from any place (Castro & Tumibay, 2021). Higher education institutions in Sub-Saharan African (SSA) countries, Kenya being one of them, are looking to the possibilities offered by ICTs to improve their higher education systems (Juma, 2002).

Additionally, the qualitative findings from this study echo the recent findings in Kenya, which showed that some of the amplified challenges in the "new normal" in higher education included: unreliable internet connectivity, access to ICT infrastructure, and preparedness for online pedagogy (Kara, 2021). Studies have also shown that going digital effectively requires substantial coordination with and swift support from institutional and national service providers, regional entities, international partners, NGOs, the private sector, and ICT providers to rally behind such tools and platforms at little or no cost (Murphy, 2020; Tamarat & Teferra, 2020). Therefore, to counter such challenges, Kenya's universities are also partnering with internet providers just as other universities in Africa such as Rwanda, South Africa, and Tunisia that partnered with internet providers and governments to overcome internet challenges by negotiating zero-rated access to specific educational and information websites (Kara, 2021; Pierre, 2021). Despite the access to stronger internet and partnership with internet service providers during the COVID-19 pandemic, teaching science and technology programmes online had challenges. It was very difficult to ascertain the credibility of the online courses and its limitations in developing students' practical laboratory skills.

Studies have reported that it is important to review how universities are introducing lab-based practical experiments to students, how they were introduced through online delivery in the pre-COVID-19 period, and what approaches must be taken in the post-COVID-19 period, especially to achieve learning outcomes whilst maintaining a high-quality educational experience (Aborode et al., 2020; Gamage et al., 2020).

The university system must provide quality education in a digital transformation scenario and accelerated educational framework change (García-Morales et al., 2021). In Kenya, the Ministry of Education Sector Disaster Management Policy drafted in 2017 and launched in 2018 asserts that diverse types of disasters hit the country from time to time. Consequently, education Emergency Interventions (EIs) need to be designed to respond to the diverse and unique needs of the affected communities where learners reside. Unfortunately, this has not been realized (Ministry of Education, 2018a). Furthermore, through its Sessional Paper of 2018 on Reforming Education and Training for Sustainable Development, the Kenyan Ministry of Education and Training for Sustainable Development acknowledges that unequal access to educational resources, mainly digital, is a critical issue that requires urgent attention (Ministry of Education, 2018b). Moreover, Ayega (2020) argues that despite good education policies, nothing much can be achieved in remote and distance learning without internet.

In conclusion, the COVID-19 pandemic has uncovered the lack of preparation of many higher education institutions in Kenya. e-Learning has brought about many benefits for both universities and students. For universities, e-learning helps them save substantial costs related to physical teaching and learning infrastructures. This study shows various challenges lecturers experienced when using technologies to teach. The study revealed that higher learning institutions in Kenya have developed very little regardless of the variety of universities offering virtual studies. Specific challenges identified included: how to arrange online classes, how to carry out online teaching according to the plan, which online teaching platform to choose, and how to monitor the effect and quality of online teaching, which will lead to a decrease in user satisfaction. e-Learning in Kenya's higher education also experienced inadequate running online communication tools such as limited student access licenses to online library materials, slow and unreliable internet. Even as Kenya gears her policies toward realizing Vision 2030, the COVID-19 pandemic has created a prime opportunity to rethink and reinvent preparation for Kenya's higher education policies. Therefore, the participants might have exaggerated their responses; however, we countered this weakness through repeated interviews to verify previous responses and the emerging themes in this study. The sample size was small, and the results might therefore not be generalizable. Nonetheless, the study findings are significant, as they can inform the government on possible measures to put in place to avert disruptions in higher education learning during calamities or other crises that Kenya might experience in future. Future studies can explore the perceptions of lecturers, students, and parents on effects of online learning post-COVID-19 among university students.

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