

# Challenges And Prospects For Quality Higher Education Via E-Learning Platforms In Private Universities: A Case Study Of Acacia University Zambia.

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## Abstract

This study was purposed to explore the challenges and prospects for quality higher education through effective e learning management in Zambian Private Universities with special reference to Acacia University Zambia (AUZ) (pseudo). In order to gain in-depth understanding of the phenomena, the study adopted a case study method which incorporated a qualitative paradigm. A purposive sampling criteria was adopted in which persons in line faculty portfolios (deans, HoDs, directors) were subjected to an in-depth structured interview to probe the issues incidental to the delivery of education services through e learning platforms as occasioned by the tragic advent of the COVID-19 pandemic. The students from the medical faculty were equally subjected to a semi-structured interview as to their experiential perspective on the available institutional e learning platforms. The preliminary results of the study indicate that from the notification of closure of universities by governmental authorities which took effect on 20<sup>th</sup> March 2020 in response to the COVID-19 pandemic outbreak, the institution integrated / blended both the full time and distance learning students on ClanED platform which was mostly through textual interaction and posting of teaching/learning materials. In trying to enhance efficiency and effective delivery of quality education service, the institution later incorporated Zoom and further brought on board google meet as virtual learning platforms. It is, however, pertinent to note that both the ClanED and Zoom platforms had challenges, including but not limited to; lack of effective interactivism for ClanED and number limits / network intermittence for Zoom respectively. The later was also the same problem bedeviling the google meet but specifically on network connectivity from both institutional and learner ends. Overall, field evidence both from faculty line managers and students suggest management and co-ordination inadequacies between administrators of the platforms and the faculty line managers, which greatly affected effective delivery of services. Nevertheless, it was gratifying to note that faculty line managers, directors and platform administrators had instituted various measures aimed at rectifying the operational and management hitches and glitches encountered in the provision education service via the e learning platforms through adoption of the google meet platform as the platform of choice, and capacity building among all line managers, administrators and student orientations.

*Index Words: Challenges, Prospects, Quality, Higher Education, E – Learning Platforms*

## 1.0 INTRODUCTION

According the global sustainable development goal number 4 of UNESCO's 2030 Agenda, inclusive quality education provision is a priority and none negotiable (Masaiti, 2018). This is premised on the global socio economic philosophy that human capital development is bedrock of societal development. Globally, education is construed as a basic human right and the foundational basis upon which to build peace, harmony, national progress and sustainable development (UNESCO, 2018). This profound conception is equally posited and heralded by the Southern Africa

Development Community (SADC) – a regional body to which Zambia subscribes. However, the COVID-19 global pandemic has caused untold misery to the prospects of brighter future for the education sector globally but particularly in Zambia (Hapompwe, 2020). The acronym COVID-19 simply stands for *Coronavirus disease* discovered in 2019. COVID-19 is a respiratory viral disease transmitted through droplets of an infected person when s/he sneezes or coughs (ibid). In response to this global public health pandemic and as mandated by the *Public Health Act Cap 295 of the Laws of Zambia and as guided by two Statutory Instruments, SI 21 and SI 22*, both issued on 14<sup>th</sup> March, 2020, the Government of the Republic of Zambia through the Ministry of Health, on 17<sup>th</sup> March 2020, solemnly issued a *pre-mature* closure notice of all universities in Zambia with effect from Friday, 20<sup>th</sup> March 2020 as a measure to curb the supersonic spread of the COVID-19. The closure implied that institutions of higher education, public and private, had to find alternative none face-to-face methods of lecture delivery so as to avert the eminent potential disruption to the annual academic calendars, which would have consequenced far telling implications on students' academic progression as well as financial stamina of these institutions.

Against this background, this study was purposed to explore the challenges and prospects for quality higher education through effective e learning management in Zambian Private Universities with special reference to Acacia University Zambia following some anecdotes, nuances and innuendos of inadequacies and discords in effective management and/or delivery of education service to students through the e learning platforms adopted.

### **1.1. Problem Statement**

Acacia University Zambia (AUZ) is among the first private universities in Zambia established over 15 years ago and officially registered under the Higher Education Act NO. 4 of 2013 of the Laws of Zambia. It currently has over 5,000 students dotted locally and within the sub-region with professional courses being delivered based on a student-centric Academic Model which deploys innovation and global best practices in its pedagogy, philosophy, operations and organization. Lecturers at AUZ are trained to facilitate learning in ways that are innovative, student-centric, participatory, active and practical. AUZ deploys a learning management technology platform that supports blended learning, flipped classrooms, projects, case studies, distance learning, and other forms of effective, collaborative and active learning. The university's strides to incorporate and integrate information communication technology (ICT) in its training of students is consistent with the 2006 ICT Policy implemented by the Ministry of Education which aimed at contributing towards reaching innovative and lifelong education and training in Zambia by 2030 (MoE, 2006). However, with the sudden advent of the COVID-19 pandemic which occasioned sudden closure of universities with the need to quickly adapt and adopt online learning platforms, it became apparently clear that the institution encountered numerous setbacks in management, co-ordination and adoption of effective e learning platforms which would sustain quality education service delivery throughout and beyond the COVID-19 era. The study, therefore, objectifies to explore these bottlenecks and or inadequacies in the e learning platforms as mode of education service delivery in a bid to clip up and guarantee quality education service delivery in the new normal consistent with the 2030 UNESCO Global Agenda, which is also enshrined in various national governments' legislations and regional bodies.

### **1.2. Study Objectives**

#### **1.2.1. Main Objective**

- To explore the challenges and prospects for quality higher education through effective e learning management in Zambian Private Universities with special reference to Acacia University Zambia.

#### **1.2.2. Specific Objectives**

- (i) To identify specific learning platforms adopted by Acacia University Zambia (AUZ).
- (ii) To critique the efficacy of the e learning platforms adopted by AUZ in delivering efficient and effective education service.

## **2.0. THEORETICAL REVIEW OF LITERATURE**

### **2.1. Importance of ICTs**

Information communication technology refers to the use of software or hardware services and supporting infrastructure to manage and deliver information using gadgets like computers, telecommunication facilities such as mobile phones, television and many other tools intended to make life easier (Blurton, 1999). ICT embraces the use of a variety of technological tools to facilitate the processing, storing, communication and dissemination of information with a range of activities (Linn, 1998). The ability to access and use information is no longer a luxury but a necessity for socio economic development (Kpangban and Adomi, 2010). The ICTs have a significant impact on all spheres of human activity (Chisenga, 2003) and the education sector is not an exception. ICT has affected learning and teaching with the potential to improve the quality of education if well harnessed (John, 2002). The potential benefits of ICTs to education are when pupils have online collaborative platform to share information and ideas and also the creation of teamwork skills which can later be useful in their past school lives. Pupils can also have access to leaning materials independently. Teachers can also benefit from the use of ICTs in education through integrating different ICTs into various teaching activities.

## 2.2. Background to the ICT Policy in Zambia

In the last two decades, there has been a massive increase in the development and use in ICT globally because the specialists have proven it to have an important role in social and economic growth (Songer, 2007). The use of ICT tools has changed the mindset of the people and the way they communicate and do business in the postmodern world. They have produced significant transformations in industry, agriculture, and many other fields, and also have the potential to transform the nature of education; such as where and how learning takes place and the roles of students and teachers in the learning process (United Nations Educational Scientific and Cultural Organization (UNESCO, 2002). This then leads to policy initiatives by governments that institutions of learning respond by integrating ICT into school curriculum so that young people are equipped to function in this ICT rich environment (Brawn & John, 2007). In March 2007, the Zambian government launched its National ICT Policy by President Levy Mwanawasa which emphasized the creation of an innovative, market responsive, highly competitive, co-ordinated, and well-regulated ICT industry. This represented an extension of Zambia's national education and national ICT policies. The aim is for ICTs to contribute towards reaching innovative and lifelong education and training in Zambia by 2030 (MOE, 2006). The policy will enhance the level of understanding as the learners will be able to research more on their own even when the teacher is not available. The guiding principles of the policy include general standards that the Ministry of Education wishes to uphold and an integrated approach which integrates all aspects of the value chain in the education process that inevitably must be adopted. The policy also provides an overview of goals, objectives, and government commitment in key programme areas of ICT infrastructure to education institutions, curriculum integration, teacher training, distance education, administration and support services, (MoE, National ICT Policy, 2006)

As indicated in the foregoing paragraph, the Zambian government through the line education ministries recognise the principal role played by ICT in education information dissemination. This is reflected in the drive to enact the ICT policy to ease the prescription of quality education service provision and setting up of various structures and infrastructure to guarantee accessibility and attainability of the blue prints. There is no longer any taint of doubt that ICT has changed the way of life and most importantly the way of learning. Integrating various learning platforms in conformity to the changing trends has become an optionless option to learning institutions at almost all levels more especially with the tragic advent of the global pandemic – COVID 19.

## 2.3. Barriers to Integrating ICT in the Teaching and Learning Process

Several studies reveal a number of factors which influence teachers' decisions to use ICT in the classroom. According to Schiller (2003), personal characteristics such as educational level, age, gender, educational experience, experience with the computer for educational purpose and attitude towards computers can influence the adoption of a technology. The study conducted by Jones (2004) discovered seven barriers which affected the integration of ICT into lessons: lack of confidence among teachers during integration, lack of access to resources, lack of time for the integration, lack of effective training, facing technical problems in use, lack of personal access during lesson preparation, age of the teachers, and teaching experiences. Jones (2004) and Keong *et al.*, (2005) determined that lack of technical support was a barrier to the successful integration of ICT in teaching. Becta (2004) also agreed that lack of technical support available in schools and technical maintenance is the main problem in integrating ICT in classrooms. Thus, there are

still several factors hindering the integration of ICT into lessons. Hare (2007) also stated that lack of policy framework, inadequate infrastructure and high cost, and inadequate in-service training on ICT integration in education have had profound impact on prospects to integrate ICT in the teaching-learning process.

Technology advancement has created a greater demand on teachers to engage with various types of technology in carrying out their routine work (Prokopiadou, 2012 & Teo, 2015). Hence, in order to be effective, teachers should not only strive to improve their pedagogical knowledge and instructional skills, but they should constantly adapt to new technologies and refine their knowledge, skills and competencies in order to integrate instructional technology efficiently and effectively (Pynoo *et al.*, 2011). Teacher ICT competency is the driving force toward achieving the goals of technology integration into the classroom (Varol, 2013).

The various theoretical studies conducted seem to converge on the necessity of ICT and the digitization of the learning process as a way to guarantee efficiency and effectiveness in the delivery of education information to learners at all levels. It is also clear that the success of ICT in the education sector globally is dependent on a number of factors, among them being: training of teachers, provision of infrastructure, availability of technical support, competences / experiences of teachers and having the right attitude by teachers.

#### **2.4. COVID – 19 and e Learning Platforms in Higher Education Institutions**

Indeed, there is no gainsaying that as the COVID-19 pandemic gathered momentum and spread to more nations, concomitantly affecting more citizens with its fatalities increasing exponentially in different countries, many global universities embraced online learning and online educational tools and resources (Chaka, 2020). In other words, they effectively scrambled to seek life and to a safe haven online in keeping with the call for social and physical distancing for both students and faculty, their core stakeholders. To this effect, the online space was awash with eye-catching headlines such as: *'This is online education's moment' as colleges close during coronavirus pandemic* (Bary, 2020); *Coronavirus pushes universities to switch to online classes* (Houlden & Veletsianos, 2020); *Coronavirus exposes digital disparities between students as learning goes online* (Sampathkumar & Shwayder, 2020); and *Coronavirus quarantine could spark an online learning boom* (Perrotta, 2020). *This was, indeed, a coronavirus moment for global universities, a momentous event aptly captured by Miller (2002, p. 5) as follows: "The coronavirus has colleges and universities swinging into action to move courses online."*

According to Lin *et al.*, (2020), online learning is not a new phenomenon in higher education, especially in the distance education sector. Even for residential, campus-based HEIs, there are some of them that often adopt an online learning mode as part of their blended learning ecosystem. Since its incipient days of electronic education (e-education), which saw electronic mail (email) become a disruptive technology and its mid-point time that witnessed the learning management system (LMS) become a legacy learning technology of choice, online learning has radically evolved. However, the uptake of online learning varies with individual HEIs and with individual countries (cf. Bates, 2016; Lin *et al.*, 2020; Palvia *et al.*, 2018; Sener, 2010). Conventionally, online learning is a web-based e-learning which, in the context of the higher education (HE) sector, is mostly employed by distance education institutions and by certain residential HEIs (Singh & Thurman, 2019). In the case of the former, online learning is a lifeline for all matters related to teaching and learning, whereas in the latter case, online learning can be adopted alongside a face-to-face learning mode as part of a blended learning setup. In either case, online learning is deployed as a deliberate and well-coordinated effort born out of an overall institutional plan and embedded in institutional curriculum and pedagogy. Of course, there are multiple definitions of online learning, and at times, the concept is used in distinct and contradictory ways (Singh & Thurman, 2019). One of the core definitions of online learning articulated by Blackboard Support (1998) that resonates with this paper is that it is a teaching and learning approach that employs Internet technologies meant to communicate and collaborate in a given educational setup. This approach entails: student-student and faculty-student communication; student-centred pedagogies; 24/7-hour course material accessibility; just-in-time strategies to evaluate and assess student progress; and minimizing administration related challenges to course management (Blackboard Support, 1998).

#### **Types of Online Tools and Resources Utilized by 64 U.S. Universities during the COVID-19 pandemic.**

According to Chaka (2020:12), there are various online tools and resources that 63 of the 64 U.S. universities explored as part of their online instruction migration during the COVID-19 outbreak. These tools and resources ranged from Zoom, Canvas and Blackboard for the top most used online tools and resources during this period to Coursera, Play Posit and Vimeo among the least used tools and resources. Some tools and resources were utilized more than others and, as such, became more prominent than others. To this effect, the two most used and adopted tools were Zoom and Canvas, with the former as the most adopted and utilized tool overall (it was embraced by 58 of



the 64 universities), while the latter was the second most used tool. It was embraced by 31 universities. The ten most used tools were: *Zoom; Canvas; Blackboard (Collaborate); Panopto; Microsoft Teams; WebEx; Kaltura; Microsoft Office 365; Google Hangouts/Meet; and OneDrive (ibid)*. Of these tools, Zoom exceeds Canvas as the second most utilised tool by 27 more universities that embraced it. Moreover, it exceeds Blackboard (Collaborate) as the third most used tool by 42 universities and OneDrive as the tenth most used tool by 48 universities. When the tools performing the same functions are aggregated, two dominant categories emerge: video conferencing platforms and LMS platforms. To this end, the video conferencing platforms emerge as the most utilised platforms. These include: Zoom; Blackboard (Collaborate); Microsoft Teams; WebEx; and Google Hangouts/Meet. Collectively, these five platforms were used and embraced by 109 universities. Of these platforms, Zoom was adopted by most universities, followed, at a distant second, by Blackboard (Collaborate). However, for the South African Universities, it was observed that the platforms mostly used were Blackboard (Collaborate), institutional LMSes, WhatsApp, Zoom and Moodle for the most used online tools and resources during this period to Coursera, Facebook, Kaltura, Sakai and Skype among the least used tools and resources (Chaka, 2020).

While Chaka's (2020) analyses of e learning platforms among the target universities suggested a broad range of facilities with Zoom topping the list as being the most preferred platform, AUZ relied more on google meet as being the best and most stable platform after several trials and challenges encountered with Claned and Zoom. The challenges led to plethora complaints from the users (lecturers, students, faculty administrators etc.).

## 2.5. Theoretical Frameworks

Albert Bandura's (1986) Social learning theory or social cognitive theory focuses on what people learn from observations and interacting with other people. It is often called a bridge between Skinner's behaviorist and Piaget's cognitive learning theories because it encompasses attention, memory, and motivation (Skinner, 1950 & Piaget, 1960). Bandura and his colleagues: Dorrie and Sheila Ross continued to demonstrate that social modeling is a very effective way of learning. Social cognitive theory further claims that learning occurs in a social context with a *dynamic and reciprocal interaction of the person, environment, and behavior*. Social cognitive theory posits that people are not simply shaped by that environment; they are active participants in their environment. Bandura is highly recognized for his work on social learning theory and social cognitive theory. On the other hand, David Kolb's Experiential Learning theory posits that learning is a cyclical process that capitalizes on the *participants' experiences* for acquisition of knowledge. This process involves setting goals, thinking, planning, experimentation, reflection, observation, and review. By engaging in these activities, learners construct meaning in a way so unique to themselves, incorporating the cognitive, emotional, and physical aspects of learning (Oxendine *et al.* 2004 & Kolb, 1984).

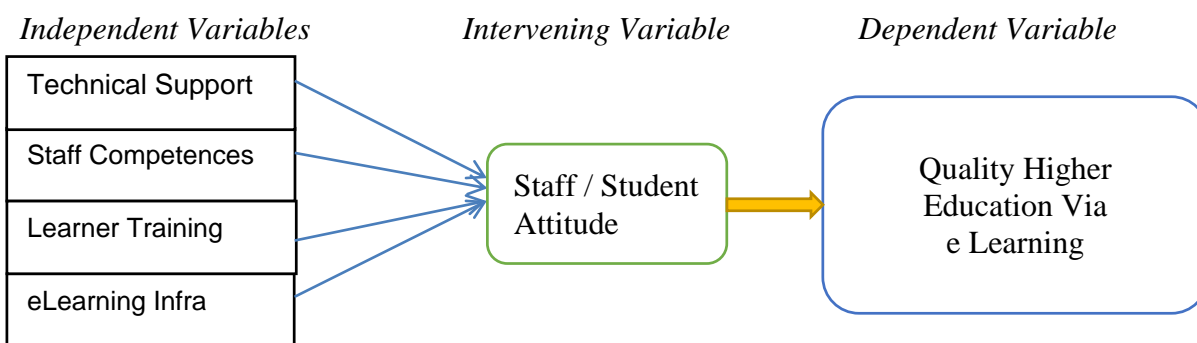
The foregoing theories anchor the study and are on point that learning perceived to have greater possibility of achieving desirable learning outcomes is one in which learner take center-stage of the learning process socially, cognitively, experientially and is to some extent hands-on. In this case, it reduces a teacher to more of a facilitator than the dominator of the whole process. Further implying that all the pedagogical and learning materials i.e. traditional or digital must be organized in such a way which motivates a learner and enable them retain the concepts derived there from. Materials in e-learning must be dynamically intriguing and inspiring a learner to achieve greater skills by also being able to refer, rewind or retrieve information for further personal analysis.

## 2.6. Study Gaps

Admittedly, there is quite limited academic literature with regard to the daunting impact of COVID-19 on the education sector both globally and locally. One mostly hot cake cited material is a handbook assembled by seventeen Chinese scholars titled: "Undisrupting learning" during the COVID-19 outbreak. This handbook provides a snapshot innovative and bespoke strategies for delivering teaching and learning in response to the COVID-19 pandemic (Huang *et al.*, 2020; also see Amos & Howard, 2020; Fernandez & Shaw, 2020; Jowsey *et al.* 2020; Lin *et al.*, 2020; Ng & Peggy, 2020; Viner *et al.*, 2020; Wang, 2020). The other most recent publication was done by Chaka (2020) in which he, via a desk review, provided an analysis of the response of selected HEIs to how they offered teaching and learning during the COVID-19 outbreak covering 64 US and 21 South African universities. Hapompwe (2020) also wrote a paper on the impact of COVID-19 on the 2020 junior and senior secondary school examinations candidates. All these papers cannot be comparable to the current one which undertakes to unearth the challenges and prospects for quality higher education via e learning platforms with special reference to private universities in Zambia.

## 2.7. Conceptual Framework

The conceptual framework of a study is the system of concepts, assumptions, expectations, beliefs, and theories that support and informs research. Robson (2011) observes that it is a key part of the design. Miles *et al.*, (1994) defined a conceptual framework as a visual or written product, one that explains, either graphically or in narrative form, the main things to be studied and the key factors which may be concepts or variables and the presumed relationships among them. This paper has been guided by a conceptual framework depicting precursors to quality higher education via e learning (independent variables) as being technical support, staff competencies, learner training, e learning infrastructure / facilities and staff attitude. The concept of Technical support as one of such independent variables consist in the commitment and aptness of the personnel with regard to challenges and needs of the students. It should be mentioned that the prompter the response to the learners' need the better the system's service delivery. Staff competence is understood to mean the labour force's ability, skills and knowledgeability to deliver the needed service to the expectant learners, more so a labour force so quick to adapt to the e learning platforms with ease. This has a direct link to learner training which is another independent variable contextualized to mean learners having been trained in how to use the online identified platforms. As a new phenomenon, nevertheless, both the staff and the learners' 'attitudes to the introduction and utilization of such platforms could have an implication on the service delivery. **Figure 1** below shows the paper's Conceptual Framework:



**Figure 1:** Study's Conceptual Framework  
**Source:** Author's Own Construction (2020)

### 3.0. METHODOLOGY

In order to gain in-depth understanding of the phenomena, the study adopted a case study method which incorporated a qualitative paradigm. A purposive sampling criteria was adopted in which persons in four faculty portfolios (Deans, HoDs, directors) were subjected to an in-depth structured interview to probe the issues incidental to the delivery of education services through e learning platforms as occasioned by the tragic advent of the COVID-19 pandemic. These line managers were eight (8) in total with the addition of eight (8) lecturers across all disciplines. Twenty (20) students from the medical faculty were equally subjected to a semi-structured interview as to their experiential perspective on the available institutional e learning platforms. The IT Manager was also interviewed in order to get a balanced view of the phenomena with all data being transcribed in themes thereafter.

### 4.0. ANALYSIS AND DISCUSSION OF FINDINGS

#### 4.1. AUZ Platforms Adopted

The study ascertained that AUZ transitioned to blended online learning which brought together the full time and distance learning students via e learning adopted platforms. The university adopted Zoom, google, WEBEX, WhatsApp, Facebook and Claned textual as initial platforms. One of the line managers stressed that:

*"It was a game of trial and error as the premature closure of universities came without advance preparations ... we initially adopted all these platforms in order to determine which ones could be more reliable and stable in serving the education service needs of our students..."*

#### 4.2. E Learning Platform Challenges

The line managers, directors, lecturers and pupils shared similar sentiments on the challenges inherent with each of the platforms initially adopted by the universities. In the case of Claned, lecturers and students could only interact

textually and videos could not be shared. This robbed students' interactivism and experientialism which are fundamental bedrocks in enhancing teaching and learning as assimilation, accommodation and absorption of concepts are necessitated. This is congruent to Bandura's argument in his social cognitive theory that the context must benefit, influence and necessitate learning environment. As earlier posited, the social environment is precursor to the realisation of Piaget's concepts of assimilation, organization and accommodation in his famous cognitive theory. It, therefore, follows that while the Claned platform enhanced the student's active participation from the beginning of the lesson to the end through texting, it excluded other ways or means of making the learning environment concretely real and captivating. It is for such reasons, and perhaps others as well, that the Facebook, WhatsApp and WEBEX platforms were not encouraged as they were deemed to be expensive and unconventional means of teaching / learning but for mere social interaction. Zoom was adopted by the university management and heavily encouraged but had connectivity and operational challenges. Firstly, it could only accommodate up to 100 students against 200 students in some classes. Secondly, it consumed too much data though was said to be free for some initial few minutes. Thirdly, it could only record up to 40 minutes and thereafter stopped. Google became the ultimate best and preferred platform by all the participants as it accommodated up to 250 participants, records as much as one wants and thereafter the video sent to the participants' emails via google drive. Google platform allowed for maximum interaction including presentation of lectures via power point, student discussions and demonstrations, among others.

The mostly cited challenges operationally and otherwise by students were electricity loadshedding as the power utility company then imposed a 12-hour loadshedding effective April 2020. The students also complained of internet bandwidth expenses and internet cost as the mobile network providers did not lower the cost of the same. Internet connectivity and intermittence was another challenge. One student remarked:

*"You find that the internet is cutting continuously and this affects concentration, attention and retention ..."*

In terms of lecturers, computer illiteracy, attitude and electricity loadshedding were the fronting challenges. One of the elderly lecturers remarked:

*"Some of us are the BBC – "born before computer" and before these programmes are implemented, we needed training so that we could be more efficient and effective in service delivery ... we did not all go to computer schools and this situation should be addressed and perhaps the loadshedding issue although this may not fall within the arm-pit of the university management."*

It should be stressed that technical support and effective management of an innovation become a predicable means of its probable success. Necessity is the mother of innovation. E learning has come to stay and necessary measures need to be put in place to guarantee its success in providing quality higher education. Capacity building and learner inductions in the access and utilization of the platforms coupled with mind-set change sensitizations are the way to go if ICT has to see efficiency and effective service delivery through its relevant application in the sector.

Some Deans and HoDs lamented that among the major challenges of the e learning transition was monitoring of students' lecture attendance. This was in the wake of the fact that the system was only accessible to paid up students and the faculty administrators did not know who had paid and who had not. Consequently, the platform can arguably be said to be elitist in nature as it systematically excluded the financially struggling students from the learning platform. Sadly, from humanistic perspectives, there existed no deliberate intervention within the university to cater for the students who at the time of learning on such prohibitive platforms had not yet paid their tuition fees in full. However, the university, without recourse to the fact that some students never accessed the Google learning platforms, still went ahead demanding fees from such students in full. It had not been made clear whether some special arrangements would be made to meet the value for their money. They also observed that the transition had brought an additional workload to lecturers as full timers could not be met at the same time with distance learning students though doing same modules due to different study modes. The distance learning students were mostly working class and could not be available for class due to their busy schedules during the day.

On the efficacy of the google virtual platform, one IT administrator remarked:

*"The platform is good compared to the rest although it could have been better if it had additional features like being able to show student fees balances, student results, allowing for online registration and e library.... The none availability of these features make it to be limited only to lecture presentations and leave other facilities to be provided by another platform which proves to be costly..."*

## 5.0.CONCLUSION AND RECOMMENDATION

### 5.1.CONCLUSION

This study has demonstrated the fact that COVID-19 necessitated the transition of AUZ's teaching/learning to online platforms as a mitigative measure to the abolition of the face-to-face contacts meant to curb the further spread of the novel corona virus. The university adopted quite a variety of platforms (some on trial and error basis) such as Facebook, WEBEX, Zoom, google, WhatsApp and Claned. Some of these platforms (FB, WEBEX, WhatsApp and Zoom) proved to be unsustainable on account of cost, user-unfriendliness and connectivity. The university, however, maintained Claned for assignment / coursework uploads for students while google has been maintained as a more sustainable, accessible and manageable platform in education service delivery across all disciplines. It is also clear from the study that realistic challenges were encountered in the utilization of these platforms and are still bound to be in effect unless pragmatic interventions are put in place. Technical support, internet cost / connectivity, loadshedding are among the major challenges confronting the effective utilization of the identified e learning platforms. Learner and lecturer attitude towards change are also other variables still impeding the effectual implementation and/or transition from traditional teaching-learning approach to the digital one. Google platform (virtual) holds a lot of bright future as a platform of choice as it is also user-friendly and with minimal disruption but with a larger number of participants and higher allowable recording volumes. It also allows effective interaction between learners and lecturers which is consistent with the social cognitive theory with advocacy of experientialism, observation, interactivism, constructivism, among others, as ways of enhancing learner material accommodation, assimilation and absorption.

### 5.2.RECOMMENDATION

This study has ascertained specific areas requiring some degree of intervention in order to make e learning sustainable and guarantee quality education. The google (virtual) platform needs to be explored further in order to establish specific benchmarks in its efficacy to be the learning platform of choice. These features could include its allowance for student fees balance checks, results uploads, student registration, e library provision etc which it currently does not have. The university needs to support the lecturers and students in terms of capacity building on the technical know-how of the platforms in effect in order for them to maximise their use and derive benefits. There is also need for the university to identify more effective and efficient ISPs and negotiate tailor-made packages with reduced bandwidth charges (even unlimited products) and costs for students to afford. Lecturers need to be financially supported timely in order to meet internet cost demands and avoid lecture disruptions. More importantly, the university can make it a point that lecturers conduct their online lectures from the university campus where there is a generator in case of erratic electricity supply though the university may need a more advanced internet infrastructure and ISP to guarantee zero network disruptions as opposed to the current scenario.

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