CHAPTER TWO

Sustaining Learning Activities in Tertiary Institutions in Nigeria amidst COVID-19 Pandemic Lockdown: The Perspective of E-Learning Strategy

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Abstract
COVID-19 pandemic has become a global challenge and the lockdown arising from its emergence has really impacted negatively on every sector of the economy (especially education) in Nigeria and the world over. Hence, devising functional means and strategies of continuing teaching and learning in schools especially in tertiary institutions amidst COVID-19 pandemic lockdown is very necessary in Nigeria. One of such strategies is the utilization of e-learning. E-learning refers to a learning system which is obtained through the internet using electronic device (s). This is very germane because the adoption of e-learning provides tertiary institutions as well as their students or learners with the much-needed flexibility of time and place of delivery or receipt of learning information. It bridges the gap between a teacher and students in two different geographical locations. Therefore, this study centered on sustaining learning activities in tertiary institutions in Nigeria amidst COVID-19 pandemic lockdown: The perspective of e-learning strategy. This work as such, discussed extensively the concept of e-learning, historical development of e-learning, sustaining learning activities with different e-learning strategies, importance of e-learning and the shortfalls of e-learning. The study concluded that the application of e-learning in tertiary institutions could reduce educational deference, which leads to

effective e-learning experience. It was suggested that both lecturers and students should accept and embrace the shift from traditional classroom activities to e-learning approach which creates a safe online space that facilitates cooperation as well as creates an opportunity for learners to use different technologies that can cover the gap of the digital divide. It was also suggested that due to the wide set of benefits e-learning gives to students, lecturers and the educational system, e-learning should be made popular and appreciated in the educational system.

Keywords: e-Learning, Tertiary Institutions, COVID-19 and Lockdown

Introduction

Corona virus which caused COVID-19 pandemic has become a global challenge. The first human cases of COVID-19, was first reported in Wuhan City, China in December, 2019. The Director General of the World Health Organization on 30th January, 2020 declared the outbreak of the coronavirus disease 2019 (COVID-19) a Public Health Emergency of International Concern (PHEIC). Due to the nature of the disease, the World Health Organization subsequently on March 11th, 2020 declared COVID-19 as a pandemic. Because of its wide spread and devastating nature, it found its way across several countries of the world (WHO, 2020). In Nigeria for instance, Nigeria Education in Emergency Working Group (2020) reported that the Federal Ministry of Health in conjunction with the Nigeria Center for Disease Control (NCDC) confirmed the first case of COVID-19 in Nigeria on 27th February, 2020 in Lagos State. The case which was an Italian citizen who works in Nigeria but returned from Milan, Italy to Lagos caused panic in the Nigerian government and all Nigerians. The Italian citizen was confirmed at Virology Laboratory of Lagos University Hospital. Therefore, the sudden disruption of educational activities in schools and tertiary institutions across the globe as a result of COVID-19 pandemic has remained quite worrisome and a serious challenge to governments, stakeholders in the system, parents, the learners themselves and the general public.

Governments world over in a bid to contain the spread of the COVID-19 pandemic did close down educational institutions. In the Nigerian context, as part of the Federal Government of Nigeria's overall strategy to contain the spread of the virus, the Federal Ministry of Education on March 19th, 2020 issued a circular granting an approval for the closure of all schools and institutions for a period of one (1) month commencing from Monday 23rd March, 2020 to prevent the spread of the Corona virus disease (Nigeria

Education in Emergency Working Group, 2020). Having closed down educational institutions, there is need for the government to facilitate learning opportunities for students bydeploying distance learning approaches through delivering of educational contents to the students at home and supporting teachers to provide guidance to families and addressing connectivity challenges. UNESCO (2020) maintained that the action of governments globally to close down educational institutions in order to contain the dreaded COVID-19 pandemic is most expected and needed but to mitigate its immediate impact on schools' closure and the learners, there is need for the governments to device means of facilitating the continuity of education for all through digitalization of learning even in remote areas.

In the view of Atim (2020), COVID-19 has become a catalyst for tertiary institutions in Nigeria to search for innovative approaches towards sustaining educational activities while students are at home. E-learning remains one of such key strategies in which the government of Nigeria and the educational sector can employ at the moment in order to facilitate continuity in educational content delivery in tertiary institutions and other levels of education in Nigeria.

However, the issue is the level of preparedness by the Nigerian government to facilitate the process, the availability of ICT facilities in our tertiary institutions, the level of lecturers and students' ICT compliance, students and lecturers' access to e-learning facilities etc. Okon (2018) opined that the slow pace of digital inclusion in the Nigerian tertiary educational institutions at all levels is lamentable; as some lecturers and students still struggle to make full use of information and communication technology facilities for teaching and learning. Lecture-based approach to teaching is being highly used in most tertiary institutions in Nigeria. Lacinda (2020) stated that most schools in affected areas are finding stop-gap solutions to continue teaching but the quality of learning is heavily dependent on the level and quality of digital access. Moreover, the less affluent and digitally savvy individual families are more affected as their children are left behind. Unless access costs decrease and quality of access increase in all countries, issue of e-learning will remain a big challenge especially in developing and underdeveloped nations.

Concept of E-Learning

Different definitions and explanations have been given by different scholars about the concept of e-learning. Basically, the "E" in e-learning stands *for* electronic. Therefore. the original term for e-learning is electronic learning. Clover (2017), observed that the term e-learning has only been in existence since 1999 when the word was first utilized at a Computer-Based Test (CBT) systems seminar. Other words also began to spring up and are being currently used synonymously and interchangeably with e-learning. This includes online learning, virtual learning, web-based learning. E-learning refers to a learning system which is obtained through the internet using electronic device (s). It simply refers to the learning system which is based on formalized teaching but with the help of electronic resources. While teaching can take place within or outside the classroom, the use of computers and the internet services forms the major component of e-learning.

The basic and initial idea behind e-learning was to provide education to students who either cannot or choose not to be present in a traditional classroom setting. E-learning can also be termed as a network which enables the transfer of skills and knowledge as well as the delivery of education made to a large number of recipients at the same or different times. It has become more pronounced with the rapid progress in technology and the advancement in learning systems. The introduction of computers and other electronic devices was the basis of this revolution. These devices (smartphones, tablets etc) now have an important place in the classrooms for teaching and learning at all levels of education. With the evolvement of e-learning, hard copy books are gradually getting replaced by electronic educational materials like optical discs or pen drives etc. also, knowledge can also now be easily shared among learners and even lecturers through the internet; which facilitates the accessibility of information anywhere and anytime (Justin, 2010). Thus, with affordable e-learning tools such as computers and internet, education or learning can be facilitated from virtually anywhere and anytime.

Clover (2017) defined e-learning as essentially encompassing learning online through the courses that are offered on the net. It involves using emails, live lectures and videoconferencing etc, all possible through the net. This enables all the participants to give their views on a particular topic and then discuss them further. They also offer static pages like course materials that are printed for the benefit of all the participants. One of the main advantages of accessing pages on the web is that most of the web pages have hyperlinks that will lead you to another page and thus, opens up a vast amount of information on the net. Hence, it makes it easier for those who do not have the time to

actually go to a university and attend classes. In fact, technology has advanced so much that the geographical gap is bridged with the use of tools that make learners/users feel as if they are inside the classroom. E-learning offers the ability to share material in all kinds of formats such as videos, slideshows, word documents and PDFs. Conducting webinars (live online classes) and communicating with professors via chat and message forums is also an option available to users. With the right tool, various processes can be automated such as a course with set materials and automatically marked tests. E-learning is an affordable (and often free) solution which provides the learners with the ability to fit learning around their lifestyles, effectively allowing even the busiest person to further a career and gain new qualifications. With the several courses available online, students can actually sit at home and learn. No more of waking up early and attending classes or having anything to do with some irritating class mates that often distract you in the class.

E-learning is the process of extending learning or delivering instructional resource sharing opportunities, to locations away from a classroom, building or site, to another classroom, building or site by using video, audio, computer, multimedia communications, or some combination of these with other traditional delivery methods. E-learning is a technology which supports teaching and learning via a computer and the web technology. It bridges the gap between a teacher and students in two different geographical locations. It comprises all forms of electronically supported learning and teaching (Wani, 2013). E-learning system or strategy facilitates online access to learning contents and administration. It uses computer-based training and teaching materials, online conferencing, discussion boards, e-mail, computer-aided assessment and other related methods. In other words, the computer screen, keyboard and the internet connection are all set to gradually replace of the blackboard, chalk and the physical school. The most attractive feature of e-learning is that it is student-centered; as it accommodates individual preferences and needs. At the same time, it empowers students of various backgrounds to have equal access to the best resources and referral material, lecture sessions, tutoring, and experienced teachers. Most professionals interested in the use of technology in education understand the importance of an e-learning course site, whether the course is taught completely online, or in a hybrid environment where the instructor also has some face-to-face interaction with students

E-learning applications and processes include web-based learning, computer-based learning, virtual education opportunities, and digital collaboration. Content is delivered

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via the internet, intranet/extranet, audio or video tape, satellite TV, and CD-ROM. It can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video, and audio. Abbreviations like CBT (Computer-Based Training), IBT (Internet-Based Training) or WBT (Web-Based Training) have been used as synonyms to e-learning. Developments in internet and multimedia technologies are the basic enabler of e-learning with consulting, content, technologies, services, and support being identified as the five key sectors of the e-learning industry (Wani, 2013).

In the past few years, advances in information and communication technologies coupled with the continued changes in the society structure have created new paradigms for higher education all over the world. The adoption of ICT systems has led to an increased demand for open, flexible and distance learning systems, which are comprehensively referred to as E-learning. The commercialization of E-learning has made higher education easily accessible to many people across the globe thus facilitating the smooth flow of information at a cheaper cost. E-learning enables students to study under the guidance of their teachers as their mentors whether in campus-based or distance learning systems. Apart from providing virtual education, E-learning can be used to improve classroom learning processes as well as blended learning. The application of ICT in traditional systems is bound to have a significant impact on the overall education system by enhancing the accessibility of adverse education opportunities and improving its qualities within minimum costs. For maximum benefits of E-learning at minimum costs, proper policies and strategies must be implemented to integrate the available local technologies with the current education system (Suresh & Sridevi, 2018).

Historical Development of E-Learning

E-learning is a rapidly growing industry which can be traced back to the 1980s and even well before that in the form of distance learning and televised courses. Clover (2017), therefore **g**ave a vivid historical development of e-learni**n**g. He observed that the history of e-learning is evidence and suggests that early forms of e-learning existed as far back as the 19th century. Long before the internet was launched, distance courses were being offered to provide students with education on particular subjects or skills. In the 1840′s, Isaac Pitman taught his pupils shorthand via correspondence. This form of symbolic writing was designed to improve writing speed and was popular amongst secretaries, journalists and other individuals who did a great deal of note taking or writing. Pitman,

who was a qualified teacher, normally send completed assignments by mail and he would then send his students more works to be finished using the same system.

In 1924, the first testing machine was invented. This device allowed students to test themselves. Then, in 1954, BF Skinner, a Harvard Professor, invented the teaching machine which enabled schools to administer programmed instruction to their students. It was not until 1960 however, that the first computer-based training programme was introduced to the world. This computer-based training programme (CBT programme) was known as PLATO-Programmed Logic for Automated Teaching Operations. It was originally designed for students attending the University of Illinois but ended up being used in schools throughout that area. hence, these earlier online learning systems discussed above were really only set up to deliver information to students. It was not until 1970s that online learning started to become more interesting and interactive. In Britain for instance, the Open University was keen to take advantage of e-learning. Their system of education has always been primarily focused on learning at a distance. Course materials and correspondence with their tutors were delivered by post and mail. With the internet, the Open University began to offer a wider range of interactive educational experiences as well as faster correspondence with students via email etc.

In the view of Justin (2010) up until early 2000, education was practically dominated by the classroom approach where learning by students was being confined within the classroom setting. Physical presence was a no-brainer and any other type of learning was questionable at best. However, with the introduction of computer and internet in the late 20th century, e-learning tools and delivery methods expanded. In 1980′s, individuals began to have computers in their homes, making it easier for them to learn about particular subjects and develop certain skill sets. By early 90s, virtual learning environments began to truly thrive; with people gaining access to a wealth of online information and e-learning opportunities. By this time several schools had been set up to deliver courses online; making use of the internet and bringing education to people who would not have previously been able to attend a college due to geographical or time constraints. Technological advancements also helped educational institutions reduce the costs of distance learning, a saving that would also be passed on to the students; bringing education to a wider audience.

By 2000′s, individuals at home began to have access to programmes that offered them the ability to earn online degrees and enrich their lives through expanded knowledge. Today's learners crave for accessible, relevant, mobile and personalized content; all of which can get fulfilled with engaging learning. E-learning no doubt has brought about many great benefits to the educational industry and other organizations and individuals, including both young and old. Online learning does not only accommodate everybody's need but also reduces the cost of learning compared to traditional learning. Some of the most important developments in education have happened since the launch of the internet. This day's learners are well versed in the use of smartphones, text messaging and using the internet so participating in and running an online course has become a simple affair. Message boards, social media and various other means of online communication allow learners to keep in touch and discuss course-related matters, whilst providing for a sense of community.

Sustaining Learning Activities with different E-Learning Strategies

There are different types of e-learning strategies which can be employed in the educational sector for teaching and learning. This may be categorized based on the usage of internet services or based on learning tools. While an educational scientist such as Justin (2010) focus on classifying e-learning types based on the usage of internet services, Nicolas (2018) classified the types of e-learning based on tools. Thus, Justin (2010), classified the types of e-learning into computer-based e-learning and internet-based e-learning. This type of classification can be seen as more accurate because it differentiates e-learning from online learning. The former (computer-based e-learning) is the type of e-learning which does not make use of online services. Some forms of e-learning such as Computer Managed Learning (CML) and Computer Assisted Instruction (CAI) are not required to take place online but they are considered types of e-learning. On the other hand, internet-based e-learning is that which cannot be used without online services or internet.

On the basis of learning tools, Nicolas (2018) identified ten types of e-learning as discussed below.

i. **Computer Managed Learning (CML):** This is also known as Computer-Managed Learning (CML) or Computer Managed Instruction (CMI). This is because computers are used to manage and assess learning processes. Computer managed learning system operates through information database. These databases contain bits of information which students have to learn; together with a number of ranking parameters which

enables the system to be individualized according to the preferences of each student. As a result of two-way communication between the students and the computer, determinations can be made as to whether the student achieved their learning goals on a satisfactory level. Educational institutions use computer-managed learning system for storing and retrieving information which aids in educational management. This could mean information such as lecture information, training materials, grades, curriculum information, enrolment information among others can be provided via this system. Thus, the use of this platform helps university students to easily access information concerning their lectures, examinations, result/grades and other relevant information which they need.

ii. **Computer Assisted Instruction (CAI):** Computer Assisted Instruction is also referred to as Computer-Assisted Learning (CAL). It is the type of e-learning which uses computers together with traditional teaching. Computer-assisted training methods use a combination of multimedia such as text, graphics, sound and video in order to enhance learning. The primary value of computer assisted instruction is interactivity; as it allows students to become active learners instead of passive learners by utilizing various methods such as quizzes and other computer-assisted teaching and testing mechanisms.

iii. **Synchronous Online Learning:** Synchronous online learning enables groups of students to participate in a learning activity together at the same time, from any place in the world. Real-time synchronous online learning often involves online chats and videoconferencing; as these tools allow training participants and instructors to ask and answer questions instantly while being able to communicate with the other participants. This kind of community-oriented online learning has been made possible with the rapid development of online learning technologies. Before the invention of computer networks in the 1960s, truly synchronous e-learning was practically impossible to implement. Nowadays, synchronous e-learning is considered to be highly advantageous as it eliminates many of the common disadvantages of e-learning, such as social isolation and poor teacher-to-student and student-to-student relationships. Synchronous e-learning is currently one of the most popular and quickest growing types of e-learning (Nicolas, 2018).

iv. **Asynchronous Online Learning:** In the case of asynchronous online learning, some group of students could study independently at different times and locations from each other without real-time communication taking place. Asynchronous e-learning methods are often considered to be more student-centered than their synchronous counterparts, as they give students more flexibility. For these reasons, asynchronous e-learning is

often preferred by students who do not have flexible schedules because it allows them to utilize self-paced learning. Before the invention of the PLATO computer system, all e-learning was considered to be asynchronous, as there were no methods of computer networking available.

v.   **Fixed E-Learning:** Fixed in this context means that the content used during the learning process does not change from its original state and all the participating students receive the same information as all the others. The materials are predetermined by the teachers and don't adapt to the student's preferences. This type of learning has been the standard in traditional classrooms for thousands of years, but it's not ideal in e-learning environments. That is because fixed e-learning does not utilize the valuable real-time data gained from student inputs. Analyzing each student individually through their data and making changes to the materials according to this data leads to better learning outcomes for all students.

vi.   **Adaptive E-Learning:** Adaptive e-learning is a new and innovative type of e-learning, which makes it possible to adapt and redesign learning materials for each individual learner. Taking a number of parameters such as student performance, goals, abilities, skills and characteristics into consideration, adaptive e-learning tools allow education to become more individualized and student-centered than ever before. When done correctly, this could mean a new era for educational science. While this type of e-learning can be more difficult to plan and accomplish than traditional teaching methods, it's potential value and effectiveness is often understated.

vii.   **Linear E-Learning:** When referring to human-computer interaction, linear communication means that information passes from sender to receiver without exception. In the case of e-learning, this becomes a very limiting factor, as it does not allow two-way communication between teachers and students. This type of e-learning does have its place in education, although it's becoming less relevant with time. Sending training materials to students through television and radio programs are classic examples of linear e-learning.

viii.   **Interactive Online Learning:** Interactive e-learning allows senders to become receivers and vise versa, effectively enabling a two-way communication channel between the parties involved. From the messages sent and received, the teachers and students can make changes to their teaching and learning methods. For this reason, interactive e-learning is considerably more popular than linear, as it allows teachers and students to communicate more freely with each other.

ix. **Individual Online Learning:** Individual online learning in this context refers to the number of students participating in achieving the learning goals, rather than the student-centeredness of the material. This type of learning has been the norm in traditional classrooms for thousands of years. When practicing individual learning, the students study the learning materials on their own (individually), and they are expected to meet their learning goals on their own. This type of learning is not ideal for developing communicational skills and teamwork abilities in students, as it largely focuses on students learning independently, without communication with other students. Therefore, a more modern approach is necessary to supplant the communicational skills and abilities.

x. **Collaborative Online Learning:** Collaborative e-learning is a modern type of learning method, through which multiple students learn and achieve their learning objectives together as a group. Students have to work together and practice teamwork in order to achieve their common learning objectives. This is done through the formation of effective groups where each individual student has to take into account the strengths and weaknesses of each other student. This boosts the communicational skills team working abilities of the students. Collaborative e-learning expands on the idea that knowledge is best developed inside a group of individuals where they can interact and learn from each other. While this type of learning is more often used in traditional classrooms than in online courses, it's still a valid type of e-learning which can be highly effective if done correctly.

Importance of E-Learning Strategy to Tertiary Institutions
The importance of e-learning is now a given fact and it can offer an alternative that is much faster, cheaper and potentially better than traditional learning in the classroom. E-learning facilitates learning anytime and anywhere (UNESCO, 2012). E-learning therefore, helps students to take their courses at their pace and convenience. E-learning or web-based learning typically provides course information, timetable, notice board, curriculum map, teaching materials like articles, slides and handouts, communication through discussion boards and email, summative and formative assessments, students' management tools like statistics, records as well as students' tracking and links to external and internal websites that are very useful to the learners. E-learning does not only facilitate communication of information but also expands the quantity of knowledge and skills, enhances the quality of education and reduces educational costs. Similarly, Smedly (2010) observed that the adoption of e-learning provides tertiary institutions as well as their

students or learners with the much flexibility of time and place of delivery or receipt of learning information.

Shahmoradi, Changizi, Mehraeen, Bashiri, Jannat and Hosseini (2018) maintained thatwith the growth of technological expansion, one of the approaches found helpful to increase the effectiveness and efficiency of education in all levels is the use of Information and Communications Technology (ICT) that changed the lives and perspective of the world in an unimaginable way. Thus, e-learning is one of the ICT's new achievements that may provide the desired solutions to overcome the complications of traditional methods of learning which is confined to the classroom. The continuous development in the field of communication technologies has resulted in more efficient and cost-effective methods of learning as compared to traditional approaches to learning.

Writing on the need for the Integration of e-learning into Tertiary Institutions, Clover (2017) admitted that though learning in the classroom is more personal and interactive but there are a lot of benefits for adopting e-learning strategy; as it is unique in terms of convenience, speed flexibility and making it easier for students who do not have the time to actually go to a university and attend classes. In his opinion, e-learning is able to link the various educational resources in several varying formats. It is also a very efficient way of delivering courses online; as much stress on the part of both students and lecturers is highly minimal. Due to its convenience and flexibility, the resources are available for the students anywhere and at any time. The system also makes it easier for those who are part time students or working full time to take advantage of learning. E-learning promotes active and independent learning and affords twenty-four hours full access to the net except for technical challenges that may occur from time to time. Through discussion boards and chats, students are able to interact with everyone online and also clear their doubts if any. Video instructions provided for audio and video learning can be rewound and seen as well as heard again and again if a student does not happen to understand the topic at the initial time. Clover further stated that e-learning or web-based learning typically provides course information, timetable, notice board, curriculum map, teaching materials like articles, slides and handouts, communication through discussion boards and email, summative and formative assessments, students' management tools like statistics, records as well as students' tracking and links to external and internal websites that are very useful to the learners.

According to Nicolas (2018), e-learning affords tertiary institutions' students and students generally a whole lot of potential benefits over traditional campus-only programmes. Nicolas therefore, highlighted the following benefits of e-learning as seen thus:

i. **Cost Saving:** Looking at tuition prices for online programmes at traditional schools and for-profit schools, prospective students might wonder if e-learning really does have cost benefits; as online programmes often cost around as much as their on-campus equivalents. However, considerable savings can be found outside of tuition in areas such as transportation, accommodation, food, work time, childcare, security issues, risk of accidents, sexual harassment and victimization by lecturers and fellow students.

ii. **Convenience:** E-learning helps students to plan their education around their lives not the other way around. While some e-learning formats require students to be at the computer at specific times, others offer coursework that can be done at any time of day, any day of the week and from anywhere students choose. As such, a flexible learning schedule and no commute mean less interference with work, family and social life.

iii. **Connectivity:** Although, some people may think that e-learning gives isolated experience to the students but students are more often connected to their peers and lecturers than on-campus students. Message boards, peer review and video-chat study groups etc all facilitate communication between students and help bring them together. Their lecturers/facilitators are often available to answer questions via email but in rare cases where lecturers/facilitators are not accessible, students rely on one another to ask and answer questions about course materials and assignments. E-learning programmes also attract people from an array of locations and backgrounds; as students get to connect with peers they might not meet otherwise.

iv. **Improved Access:** Since all that needed for e-learning is a computer and an Internet connection, it makes education more accessible to different students and at different locations.

v. **International Students:** E-learning allows international students to be awarded degrees in universities across the globe without the hassle of moving, obtaining visas or finding an exchange programme. By implication, international students can take courses/programmes that might not be available in institutions in their country.

vi. **Students with Special Needs:** E-learning is a convenient solution for students who have a difficult time getting to and from campus due to physical disability. Those with developmental disabilities, social anxieties or conditions like attention deficit disorder may also benefit from the private, self-paced nature of many e-learning programmes while still getting to ask questions and interact with peers and instructors.

vii. **Rural Students:** Sometimes the main barrier between a student and his or her education is that the nearest institution is not just near enough. Students living in rural areas might be dissuaded from attending traditional colleges because of a long commute. Thus, an e-learning programme makes it easier for those living outside of where the institution is located. It also affords remote students the opportunity to engage with peers who have similar interests but with whom they might not ordinarily connect.

viii. **Students Seeking Specialized Degrees:** Like international students who lack access to specific courses or education programmes, students pursuing specialized degrees might not have a suitable programme in their area. E-learning therefore, affords students access to course experts from all over the world; thereby allowing them deepen their knowledge and add to their credentials.

Shortfalls in using E-Learning in Tertiary Institutions
Besides the benefits of initiating and utilizing e-learning in tertiary institutions in Nigeria, there are several limitations to this practice especially in underdeveloped and developing countries (Nigeria inclusive). According to Clover (2017), one of the main disadvantages of e-learning is that students are very likely to gain knowledge only on a theoretical basis and when it comes to putting into use whatever being learnt, it may be a little different. To him, it is because the face-to-face learning experience which may matter to some of the students is missing. Clover stated that most of the online assessments are limited to objective questions and as such, may not give full room for analytical thinking as well as critical and logical writing skills usually employed in essay questions. The authenticity of a particular student's work/assignment is also a problem; as most students give their assignments to anyone do rather than the actual students themselves. According to Arkorful (2014), in spite of the benefits of employing e-learning in tertiary institutions, it also has some shortfalls/disadvantages. Arkorful therefore, admitted that despite the claims that e-learning can improve educational quality, learning materials available online results in improved learning results only for specific forms of collective assessment. The process of e-learning in the opinion of Arkorful is also characterized by the complete absence of vital personal interactions not only between learners and instructors but also among fellow learners.

Almosa (2012) maintained that regardless of all the importance of e-learning, it still has its own challenges. This has been briefly explained below:

i.   E-learning as a learning strategy makes the learners undergo contemplation, remoteness as well as lack of interaction or relation. It therefore requires a very strong inspiration as well as skills to the management of time in order to reduce such effects.

ii. In terms of clarifications, explanation and interpretation, the e-learning method might be less effective than the traditional method of learning. This is because teaching-learning process generally is much easier with the use of face to face encounter between the instructors and the learners.

iii. When it comes to improvement in communication skills of learners, e-learning as a method might have a negative effect on the learners. Though the process might have an excellent knowledge in academics, the students may not possess the needed skills to deliver their acquired knowledge to others.

iv. Since tests for assessments in e-learning are possibly done with the use of proxy, it will be difficult if not impossible to control or regulate bad activities like cheating.

v.   E-learning may also probably be misled to piracy and plagiarism, predisposed by inadequate selection skills as well as the ease of copy and paste.

vi. E-learning may also deteriorate institutions' role socialization role and also the role of instructors as the directors of the process of education.

vii. The application of e-learning in tertiary institutions may not be possible for all fields or disciplines especially for practical ones. For instance, purely scientific fields that include practical cannot be properly studied through e-learning. Thus, e-learning may be more appropriate in social science, education and humanities than disciplines such as medical science, pharmacy, law, etc where there is the need to develop practical skills.

Suggestions

1. The use of the e-learning system as an important approach in managing knowledge and educational needs of higher educational institutions remains very key to educational development and the delivery of educational contents in Nigeria.

2. Both lecturers and students should accept the shift from traditional classroom activities to e-learning approach which creates a safe online space that facilitates cooperation as well as creates an opportunity for learns to use different technologies that can cover the gap of the digital divide.

3. The application of this approach to learning in tertiary institutions can also reduce educational deference, which leads to effective e-learning experience. Due to the

wide set of benefits it gives to students, lecturers and the educational system, e-learning should be made popular and be appreciated in the educational system.

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