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REVAMPING THE TERTIARY INSTITUTION EDUCATIONAL SYSTEM IN NIGERIA THROUGH E-LEARNING: A REVIEW OF BENEFITS AND CHALLENGES OF E-LEARNING

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Abstract

E-learning is an innovative approach for delivering electronically mediated, well-designed, learner-centered and interactive learning environments to anyone, anyplace, anytime by utilizing the internet and digital technologies in concern with instructional design principles. It is all about learning with the use of computers. In this age, learning with the use of computer is simply online ways of acquiring knowledge through the internet or through the offline. In Nigerian schools, the commonest type of e-learning adopted is in form of lectures note on CD-ROM which can be played as at when the learners desires. Though most of the educational institutions (private and public) have started setting up their ICT centers for internet services alone without actually taking into consideration other components of e-learning center, types of E-learning include Computer Managed Learning (CML), Computer Assisted Instruction (CAI), Synchronous Online Learning, Asynchronous Online Learning, Fixed E-Learning etc. advantage of E-learning are one is able to link the various resources in several varying formats. It is a very efficient way of delivering courses online, due to its convenience and flexibility; the resources are available from anywhere and at any time. Disadvantage include online student feedback is limited, E-Learning can cause social Isolation, E-Learning requires strong self-motivation and time management skills, Lack of communicational skill development in online students, Cheating prevention during online assessments is complicated etc and benefits of e-learning to students are online learning accommodates everyone's needs, lectures can be taken any number of times, offers access to updated content etc. in conclusion the flexibility offered by e-learning in terms of place of learning and time of learning means that the whole educational programmes can be rolled out across teams all over the world.

Key words: Revamping, Tertiary, Institution, E-learning

Introduction

E-learning refers to the use of ICTs i.e. Information and Communication Technology to enhance and support teaching and learning process. E-learning ranges from the way student use email and accessing course work online while following a course on campus to programs offered entirely online. Advances in ICT have revolutionized higher education in many ways like increasing access to post-secondary instruction, improving the availability of educational resources, facilitating meaningful interaction among learners, outmoded educational system and as such better prepare students and the average citizen for the information age, and or accelerate national development efforts (Albirini, 2006).

The term e-learning is not a new phenomenon in promoting education in some parts of world. Presently, some institutions in Nigeria are using it to promote distance education (DE) and lifelong learning. E-learning according to Timothy Olugbenga AJADI, Ibrahim, Olatunde SALAWU, & Femi, Adetunji ADEOYE (2008), is the use of electronic technology to deliver education and training applications, monitor learner's performance and report learner's progress. Hedge and Hayward (2004), defined it as an innovative approach for delivering electronically mediated, well-designed, learner-centered and interactive learning environments to anyone, anyplace, anytime by utilizing the internet and digital technologies in concern with instructional design principles. It is all about learning with the use of computers. In this age, learning with the use of computer is simply online ways of acquiring knowledge through the internet or through the offline – CD-ROM; the online involves the use of Internet Explorer/Navigator. It may be in form of Audio, Visual, and or Audio/Visual. The process and applications of e-learning technology include computer-based learning, web-based learning, virtual learning, blended learning, hybrid models, internet learning, networked learning, Tele-learning, computer-assisted learning and online classroom and digital collaboration where contents is delivered via the internet, intranet/extranet, audio and or video tapes, satellite TV and CD-ROM (Arbaugh, 2002; Achuonye, 2004; Okah, 2007).

In Nigerian schools, the commonest type of e-learning adopted is in form of lectures note on CD-ROM which can be played as at when the learners desires. The challenge of this method is that the numbers of students per computer in which these facilities are available are un-interactive as compared to when lectures are been received in the classroom. Some institutions adopted the use of intranet facilities; however, this is not well maintained because of incessant power problem and high cost of running generating set. Most students in Nigeria go to the cyber café but because there are people of diverse

intension on the net at the same time, and the bandwidth problem, a multimedia interactive cannot be done. Despite all these and other challenges facing e-learning in Nigeria educational institution, institutions such as University of Ibadan, Obafemi Awolowo University, University of Benin, University of Abuja, University of Lagos, National Open University of Nigeria among others has the facilities for e-learning. The number seems very low (compared to other parts of the world and the usefulness of the e-learning in the economy development) because of location of most institutions, bandwidth issue and mostly the challenge of electricity. Though most of the educational institutions (private and public) have started setting up their ICT centers for internet services alone without actually taking into consideration other components of e-learning center

Development and Delivery of E-Learning Tools and Services

The call for utilization of e-learning in various educational sectors / unit on instructional delivery is to infuse and inject efficiency and effectiveness in Curriculum implementation. However, in developing countries like Nigeria, e-learning is challenged with the problem of material devices such as computer, computer laboratories, internet and email facilities, videophone systems and teleconferencing devices, fax and wireless applications, digital library, digital classrooms, multimedia systems and the problem of multimedia courseware development among others. Other studies indicates that there is dearth of professional trained and skills teachers for eLearning, lack of facilities, infrastructures and equipment (Jegede and Owolabi, 2008).Some educational scientists have identified types of e-learning according to learning tools, while others have chosen to focus on different metrics such as synchronicity and learning content.

Types of E-Learning:

1. Computer Managed Learning (CML)

In the case of computer-managed learning (CML), also known as Computer Managed Instruction (CMI), computers are used to manage and assess learning processes. Computer managed learning systems operate through information databases. These databases contain bits of information which the student has 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 student and the computer, determinations can be made as to whether the student achieved their learning goals on a satisfactory level. If not, then the processes can be repeated until the student has achieved their desired learning goals.

Additionally, educational institutions use computer-managed learning systems for storing and retrieving information which aids in educational management. This could mean information such as lecture information, training materials, grades, curriculum information, and enrolment information among others.

2. Computer Assisted Instruction (CAI)

Computer Assisted Instruction (CAI), also sometimes referred to as computer-assisted learning (CAL), is another type of e-learning which uses computers together with traditional teaching. This could mean interactive software for the students or the kind of training software used by Patrick Suppes of Stanford University in 1966. 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 CAI is interactivity – 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.

Most schools nowadays, both online and traditional, use different variations of computer-assisted learning to facilitate the development of skills and knowledge in their students.

3. 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.

4. Asynchronous Online Learning

In the case of asynchronous online learning, groups of students 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. They can set their own timeframes for learning, and they are not required to learn at specific time intervals together with other students. 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. However, nowadays, with the availability of computers and the World Wide Web, deciding between synchronous and asynchronous e-learning becomes a more difficult task, as each has their pros and cons.

5. Fixed E-Learning

Fixed e-learning is a fancy name for something you are likely already familiar with. "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.

6. 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.

We are now at a point in time where laboratory-based adaptive instructional techniques can be used for mathematical sequencing of student data. 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, its potential value and effectiveness is often understated.

7. 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.

8. 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.

9. Individual Online Learning

Individual 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 of skills and abilities.

Advantages of E-Learning

You are able to link the various resources in several varying formats. It is a very efficient way of delivering courses online. Due to its convenience and flexibility, the resources are available from anywhere and at any time. Everyone, who are part time students or are working full time, can take advantage of web-based learning. Web-based learning promotes active and independent learning .As you have access to the network 24x7, you can train yourself anytime and from anywhere also. It is a very convenient and flexible option; above all, you don't have to depend on anyone for anything. Not only can you train yourself on a day to day basis, but also on weekends or whenever you have the free time to. There is no hard and fast rule. Through discussion boards and chats, you are able to interact with everyone online and also clear your doubts if any. The video instructions that are provided for audio and video learning can be rewound and seen and heard again and again if you do not happen to understand the topic first time around Hedge and Hayward (2004)

Disadvantages of E-Learning:

In traditional classrooms, teachers can give students immediate face-to-face feedback. Students who are experiencing problems in the curriculum can resolve them quickly and directly either during the lecture or during the dedicated office hours. Personalized feedback has a positive impact on students, as it makes learning processes easier, richer, and more significant, all the while raising the motivation levels of the students Achuonye, K. (2004)

E-Learning, on the other hand, still tends to struggle with student feedback. Students completing regular assessments become dissatisfied when they experience a lack of personalized feedback. The traditional methods of providing student feedback don't always work in an E-Learning environment, and because of this, online education providers are forced to look towards alternative methods for providing feedback. Providing student feedback in an online setting is still a relatively un-researched topic area, and it might take a while for any specific strategies to become fully research-based and proven to be effective.

Solution: Researchers have demonstrated successful examples of peer feedback systems in online learning, which could be a potential solution to the problem of limited student feedback in e-learning. Additionally, this disadvantage of E-Learning is sometimes solved

through video chats with professors, which function similarly to the professor's office hours during on-campus training.

E-Learning can cause social Isolation: The E-Learning methods currently practiced in education tend to make participating students undergo contemplation, remoteness and a lack of interaction. As a result, many of the students and teachers who inevitably spend much of their time online can start experiencing signs of social isolation, due to the lack of human communication in their lives. Social isolation coupled with a lack of communication often leads to several mental health issues such as heightened stress, anxiety, and negative thoughts.

Solution: Some of the ways to combat loneliness and social isolation in online learning could be:

Promoting increased interaction between online students.

Utilizing blended learning environments: Monitoring the students for signs of social isolation.

E-Learning requires strong self-motivation and time management skills and Lack of self-motivation among students continues to be one of the primary reasons why students fail to complete online courses. In traditional classrooms, there are numerous factors which constantly push students towards their learning goals. Face-to-face communication with professors, peer-to-peer activities, and strict schedules all work in unison to keep the students from falling off track during their studies. In the setting of an online learning environment, however, there are fewer external factors which push the students to perform well. In many cases, the students are left to fend for themselves during their learning activities, without anyone constantly urging them on towards their learning goals. Students taking E-Learning courses will find that they are often required to learn difficult materials in a comfortable home setting without any of the added pressure normally associated with traditional colleges. As a result, keeping up with regular deadlines during online studies can become difficult for those students who lack strong self-motivation and time management skills Arbaugh J. B. and Rebecca D. (2002).

Solution: Building strong self-motivation and disciplinary skills is key to succeeding in an online learning environment. Additionally, face-to-face communication with professors can be substituted with online communication, and peer-to-peer activities should be promoted between online students similarly as it would be in traditional classrooms.

Lack of communicational skill development in online students: E-Learning methods are proven to be highly effective at improving the academic knowledge of the students. However, developing the communicational skills of the students is an area often neglected during online lessons. Due to the lack of face-to-face communication between peers, students and teachers in an online setting, the students might find that they are unable to work effectively in a team setting. Neglecting the communicational skills of the students will inevitably lead to many graduates who excel in theoretical knowledge, but who fail to pass their knowledge on to others.

Solution: Peer-to-peer group activities and online lectures which require communication must be used even in an online learning environment. In doing so, we can ensure that E-Learning does not fail to teach students the communicational skills necessary to succeed in real working environments.

Cheating prevention during online assessments is complicated: Unfortunately, one of the biggest disadvantages of E-Learning continues to be cheating through various methods. Compared to on-campus students, online students can cheat on assessments more easily as they take assessments in their own environment and while using their personal computer. The students cannot be directly observed during assessments without a video feed, making cheat detection during online assessments more complicated than for traditional testing procedures. Additionally, without a proper identity verification system in place, students taking online assessments might be able to let a third party take the assessment instead of themselves, resulting in a wholly fraudulent test result.

Solution: In order to protect the authenticity of online education, anti-cheating measures must be put in place by any online education institution. The most popular anti-cheating tools currently used in E-Learning are online proctoring systems such as Examity, which use various anti-cheating measures such as automated ID verification and machine learning to detect fraudulent test-takers.

Online instructors tend to focus on theory rather than practice: Although this drawback of E-Learning is starting to be addressed and fixed by some of the more innovative online learning platforms, the problem has yet to disappear completely. The problem is that a large portion of E-Learning training providers choose to focus largely (in many cases entirely) on developing theoretical knowledge, rather than practical skills. The reason for this is evident – theoretical lectures are considerably easier to implement in an online learning environment than practical lectures. After all, without face-to-face

communication and physical classrooms to use as a workshop, implementing practical projects in an online course requires significantly more prior planning than theoretical training Arbaugh J. B. and Rebecca D. (2002).

Solution: Implementing hands-on student projects in conjunction with 1:1 mentorship are some of the most effective ways of developing practical skills in online students. There are several examples of successful practice-based online courses on platforms such as Udacity and Springboard.

E-Learning lacks face-to-face communication: The lack of face-to-face communication ties together with many of the previously mentioned disadvantages of online learning. A lack of any kind of face-to-face communication with the instructor inhibits student feedback, causes social isolation, and could cause students to feel a lack of pressure. A lack of pressure is a disadvantage in the sense that it causes students to abandon their studies more easily. Constant nudging by professors may be undesirable for many, but it's an effective method for improving student retention. **Solution:** In E-Learning, face-to-face communication must be substituted with another method of communication. For example, video chats, discussion boards, and chat-rooms could help deal with the negative effects associated with a lack of face-to-face communication during online learning.

E-Learning is limited to certain disciplines: All educational disciplines are not created equal, and not all study fields can be effectively used in e-learning. For now, at least E-Learning tends to be more suitable for social science and humanities, rather than scientific fields such as medical science and engineering which require a certain degree of hands-on practical experience. No amounts of online lectures can substitute an autopsy for medical students or real-life industrial training for a budding engineer. While this could change in the future, we are currently not yet a point where we can fully teach all professions solely through E-Learning. **Solution:** For some disciplines such as medical education, blended learning could serve as an excellent alternative to fully online learning. In the case of nursing students, research showed that blended learning courses achieved similar posttest results as traditional course formats while increasing the satisfaction ratings of the participating students significantly. Arbaugh J. B. and Rebecca D. (2002)

Online learning is inaccessible to the computer illiterate population: 96% of Americans own mobile devices, and around 73% of Americans own a personal computer. Therefore, it would be easy to argue that online education is easily accessible to most people. However, these statistics don't paint the whole picture. Despite the booming

growth in technological capabilities, the rates of computer literacy are still far from perfect. The OECD average percentage of computer illiterate people hovers around 25%, meaning that a quarter of the population will have major trouble in accessing E-Learning as an educational method. And, these are OECD countries we are talking about, which are considered developed countries with a high-income economy.

In other parts of the world, the situation is often direr. In India, for example, despite the country being one of the major players in the world of E-Learning, there is still a large gap in computer literacy in the population. Until such gaps in society exist, online education will not be able to reach all citizens. Therefore, it's highly important that we look at online learning as an addition, rather than as a replacement to traditional education. **Solution:** Finding a solution to the complex problem of raising computer literacy is no easy task. However, initiatives such as Digital India show promise in improving the computer literacy rates amongst the population.

Lack of accreditation & quality assurance in online education: If E-Learning is to be considered as effective and authentic as traditional learning, it must be ensured that all online schools are qualified and accredited. Unfortunately, at the current point in time, there are still a vast number of online learning platforms which are unaccredited and where all the materials are quality checked by no one besides the instructors themselves. As such, poor quality assurance and a lack of accredited online learning providers continue to weaken the legitimacy of online education. **Solution:** There are numerous considerations for quality assurance of E-Learning, and they must be followed in order to ensure the authenticity of E-Learning. Additionally, there are accreditation management systems such as Creatrix which provide a centralized solution for the accreditation process Achuonye, K. (2004).

Benefit of e-learning for student

E-Learning has completely transformed the way in which learning is imparted to students. Unlike traditional chalk and board method of teaching, e-learning makes learning simpler, easier, and more effective. Here are 9 features of eLearning that make it advantageous to students according to Albirini, A. A. (2006). Today's learners want relevant, mobile, self-paced, and personalized content. This need is fulfilled with the online mode of learning; here, students can learn at their own comfort and requirement. Let's have an analytical look at the advantages of online learning.

1. Online Learning Accommodates everyone's Needs: The online method of learning is best suited for everyone. This digital revolution has led to remarkable changes in how the content is accessed, consumed, discussed, and shared. Online educational courses can be taken up by office goers and housewives too, at the time that suits them. Depending on their availability and comfort, many people choose to learn at weekends or evenings.

2. Lectures Can Be Taken Any Number Of Times: Unlike classroom teaching, with online learning you can access the content an unlimited number of times. This is especially required at the time of revision when preparing for an exam. In traditional form of learning, if you cannot attend the lecture, then you have to prepare for that topic on your own; in eLearning, you can attend the lectures whenever you want with ease.

3. Offers Access to Updated Content: A prime benefit of learning online is that it makes sure that you are in synchronization with modern learners. This enables the learner to access updated content whenever they want it.

4. Quick Delivery of Lessons: eLearning is a way to provide quick delivery of lessons. As compared to traditional classroom teaching method, this mode has relatively quick delivery cycles. This indicates that the time required to learn is reduced to 25%-60% of what is required in traditional learning. There are some of the reasons why the learning time is reduced by eLearning: Lessons starts quickly and also wrapped up in a single learning session. This enables training programs to easily roll out within a few weeks, or sometime even days, Learners can define their own speed of learning instead of following the speed of the whole group, Saves time as a student does not need to travel to the training venue. You can learn at the comfort of your own place, Students can choose to study specific and relevant areas of the learning material without focusing on each and every area. For example, they can skip certain areas they do not want to learn.

5. Scalability: eLearning helps in creating and communicating new training, policies, concepts, and ideas. Whether it is for formal education or entertainment, eLearning is very quick way of learning

6. Consistency: eLearning enables educators to get a higher degree of coverage to communicate the message in a consistent way for their target audience. This ensures that all learners receive the same type of training with this learning mode.

7. Reduced Costs: eLearning is cost effective as compared to traditional forms of learning. The reason for this price reduction is because learning through this mode

happens quickly and easily. A lot of training time is reduced with respect to trainers, travel, course materials, and accommodation. This cost effectiveness also helps in enhancing the profitability of an organization. Also, when you are studying at your own place, you are relieved from paying for travel expenses (e.g. accommodation) when training happens in another city/state and/or external learning materials.

8. Effectiveness: E Learning has a positive influence on an organization's profitability. It makes it easy to grasp the content and digest it: It results in improved scores on certifications, tests, or other types of evaluation. Higher number of students who achieve 'pass' or mastery' level, Enhanced ability to learn and implement the new processes or knowledge at the workplace, Help in retaining information for a longer time

9. Less Impact on Environment: As eLearning is a paperless way of learning, it protects the environment to a lot of extent. As per a study done on eLearning courses, it has been found that distance-based learning programs consumed around 90% less power and generated 85% less amount of CO2 emissions as compared to traditional campus-based educational courses. With eLearning, there is no need to cut trees for obtaining paper. Thus, eLearning is a highly eco-friendly way of learning.

The Impact of E-Learning Education

Improved Communication:- for students who struggle to read, e-learning can provide new fun ways of displaying letters and words which make the process of developing language a lot more successful (Bird E. et al 2012). It can encourage educator to adapt their own teaching style and use more creative ways of communication in the classroom.

Flexibility:- As everyone working within the education sector knows, time pressure for teaches and educates are becoming ever more pressing between the time spent teaching in the classroom and the time employees have to develop their own skills. E-learning gives total flexibility to the school and teaches as their learning can be accessed online at a time to suit the individual. It is a well-known fact amongst educators that different people learn best in different environment. E-learning gives you the flexibility to approach your training in a place that suit the learner, whether at home or shop.

Development tools: - It also helps to positively impact individual development plans within the educator sector to motivate and support employees to achieve their short and longer term career goals within an e-learning portal, training paths can be development that gives clear light into the required learning that has to be undertaken before the progression

can happen. The helps the individual, teacher or educator see clearly the expectations and requirements of them to continue their progression.

Generally there is still a lack of awareness amongst the population, especially parents, of the effectiveness of e-learning. Many parents still feel that the traditional learning mode is better. Considering this, most e-learning facilities are functional at most Nigerian universities, but inadequate because of the high population os students in our federal and state universities but most private universities have managed to implement e-learning to an adequate level which is commendable with the Nigeria education management. According to the response, poor power supply. The most common challenges of implementing e-learning with Nigerian Universities are management's attitude, erratic electricity supply in most part of the country and non-inclusion of ICT programs in teachers' training curricula at the basic levels of education.

Poor technical infrastructure: The technical infrastructure in developing countries in not highly developed, which means that phone-lines and internet connections are unreliable or slow due to narrow bandwidth.

Limited expertise: - There are few technical staff in most Universities to maintain the current system. Lack of, or inadequate trained personnel are a challenge to the use of ICT in higher Institutions.

Financial restrictions:-In developing countries the cost of ICT equipment can be a limiting factor with regards to reaching a bored target audience and making sure that everyone can afford this service. Also misappropriation of funds has added to the ongoing problem.

Internet Connectivity:- The cost of accessing the internet in Nigeria is still on the high side. Hence, some students find it a challenge to afford. However, the government should make the internet connectivity a priority for higher education to be able to leverage on the promises and opportunities ICTs present.

Distraction and Time Management:- While studying from home or wherever one may be there can be more distractions than usual, especially with family and possible younger siblings around (Timothy O 2008). As a result of these distractions and having additional responsibilities time management become more challenging.

Lack of In-person Interaction: - With both instructors and classmates can be particularly challenging taking lasses online from off campus residence. The Science student usually leads a study group for younger students, so you have in person, face to face interaction

Conclusion

E-learning can be defined as the online delivery of information. It can also be defined as integrating learning with technology (Okah, U. A. 2007). It is instruction delivered through purely digital technologies such as CD ROM, the internet and private networks. E-learning can also be defined as the online delivery of information for the purpose of education, training or knowledge management (Peters, S. and Wals, A. E. J. 2012) or performance management (Okah. U. A 2007)

Government all over the world plays a key role in developing, funding and regulating ICT infrastructure as well as promoting internet connectivity. It can be deduced that ICTs are essential for contemporary educational development of any nation. In recent time, nearly everyone in the industrialized nation has gained access to ICTs, and is computer literate. Furthermore, the continuous advances in information technology have enabled the realization of a more distributed structure of knowledge transfer through the development of e-learning. The developing countries have embraced ICTs and Consequently e-learning so as to keep pace with unimaginable speed in the area of technology. The use of ICTS in Nigeria and African Countries generally is increasing and dramatically growing. Since e-learning systems allow students to take courses at their own time and pace, it is more convenient than their in-person counterparts. Peters, S. and Wals, A. E. J. (2012) connotes the flexibility of e-learning stating that students can even refer back to previous lectures without affecting the learning pace of other students. Forums and communities built around the massive online open courses (MOOC) add to the usability of these e-learning programs (UNESCO 2012).

E-Learning has revolutionized learning in the workplace for numbers of years, improving efficiencies, workflow and Collaboration. The flexibility offered by e-learning in terms of place of learning and time of learning means that the whole educational programmes can be rolled out across teams all over the world. Within the educational sector, e-learning has been used within classrooms from primary to university to deliver impactful causes that are for engaging and benefit to humanities.

Recommendations

Government and all stakeholders in the educational sector should provide infrastructures for effective e-learning in our tertiary institutions

Training and retraining of teachers in the tertiary institution should annually to make them effective in the use of e-learning system

All tertiary institution should adopt e-learning and put all modalities in place for easy practice for the teachers and students

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