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E-LEARNING AS AN EFFECTIVE METHOD OF EDUCATION DELIVERY IN NIGERIA

By

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Abstract

The history of e-learning shows that it has been a transiting concept over the years. It has proved to be a reliable source of teaching and learning. Globally, nations have been greatly influenced by the multiplicity of its roles in education. It has impacted the way we teach and learn and Nigeria should not be left out. This study takes a cursory look at the concept of e-learning as an educational tool. The various types of e-learning were extensively discussed and blended learning was identified as suitable for Nigerian schools. The paper concluded that e-learning, as an integral part of the learning process, should be blended with face to face teaching method. This study recommended that government should subsidize the cost of laptops for students, enabling them acquire one. In addition, government should also provide constant supply of electricity and internet connectivity both in urban and rural areas. The Ministry of Education should provide continuous training and retraining programs for teachers on how to use the various e-learning software.

Keywords: E-Learning, Effective Teaching Method, Information Communication Technology.

Introduction

E-learning as a concept has become a platform for meeting the needs of many learners all over the globe. The demand for this platform came as a result of the desire to make education available to diverse learners. The origin of e-learning can be traced as far back as the 19thcentury with the use of correspondence by Isaac Pitman to teach his pupils shorthand. Later, in 1924, Professor Sidney Pressey invented the testing machine. Consequently, in 1954, a Harvard professor Skinner invented the "teaching machine" which enabled schools to administer programmed instruction to their students. In the 20th century, the arrival of computer and the internet brought about the digital world and global village. The internet, is a global wide area network that connects computer systems across the world using high bandwidth data lines (Christensson, 2015). This system has changed the world so much so that most people prefer it as a major means of everyday communication (Dentzel, 2014) it is fast, convenient and has available instant messaging tools and social networking sites. Immense quantity of information are uploaded and downloaded over the internet which can be used to solve virtually any problem. In the area of education, it has provided boundless possibilities for learning such as Google classroom, Moodle, Edmodo and many more. Today, the internet can be used to access libraries, encyclopedias, art galleries, news archives, as well as research from anywhere in the world (Dentzel, 2014). It is important to say that information and communication technology is the backbone of eLearning. Without ICT, e-learning will become a complete fiasco, hence as ICT keeps advancing, e-learning will also advance, becoming more practicable in schools and providing lifelong learning. The purpose of this study is to justify the need for e- learning in the Nigerian Educational system.

E-learning is defined as the use of ICT to deliver the content of a course. It brings learning experiences and resources right from a website to your desk (Northedge, 2008). It is also defined as technology mediated and digitally empowered learning that utilizes hardware such as tablets, printers, PCs, digital camera, digital videos, scanners, overhead projector, (OHP, and OHP screen) USB drives, CD-ROM, to empower teacher to student interaction. (Eze, Eze-Chinedu & Bello, 2018). This concept has vitalized our educational delivery method through vast arrays of learning resources such as ICT tools, quizzes,

games, mind maps, interactive worksheets and online instructional videos, and is still advancing.

Many nations of the world have felt the impact of e-learning one way or the other. Countries such as United States, United Kingdom, China and India have established e-learning programs and even offer online degrees in their universities. According to research; the growth of online enrollment has increased tremendously in United States with online enrollment higher than students taking face to face classes (Seaman &seaman as cited in Palv, 2018). The cause of this growth has been noted by researchers, to be the flexible nature of online programs which makes it possible for one to learn at ones' pace. Bastrikin (2020) noted that a lot of Americans enroll in online classes where fulltime enrolment in a traditional classroom is not possible. This means that some courses in America are strictly online while some are in a face to face classroom.

In India, the government launched platforms such as Digital India and Skill India to help spread digital literacy among the populace. Ghana is known to be one of the most e-learning progressive countries in Africa with better access to internet at the disposal of its citizens (Kotuaa et al as cited in Palv, 2018).

In Nigeria, the case is different. This is vividly portrayed in what happened at the onset of the COVID 19 pandemic in Nigeria. Schools were closed to avoid massive transmission of the disease, with no provision for learning to continue. While their counterparts in the Western part of the world continued their education online, most schools in Nigeria especially public owned schools could not learn. Why? No provision for e-learning! This was confirmed by the statement made by Professor Ogunyemi, the president of ASUU on the claim by some private universities that they were learning online. In his words, "what is defined as e-learning in Nigeria today is shallow; it doesn't reflect the state of infrastructure; it does not reflect the demands of e-learning" (Idris2020). According to Ajadi, Salawu and Adeoyo, (2008), the e-learning adopted in Nigeria is in form of lecture note on CD-ROM which can be played as at when the learners desires. It is quite evident that true eLearning is more than lecture note on CD-ROM. Mahmoud (2008) noted that CD-ROM does not rule out the complimentary use of the internet, according to the researcher it can be used to augment e-learning. In a study conducted by Anan and

Anwar (2020) on online learning amid the Covid-19: A students' perspective. They discovered that online learning is not effective in underdeveloped countries such as Pakistan because of the inability of majority of the students to access the internet. In another study by Anene, Imam and Odumuh (2014) on the problems and prospects of e-learning in Nigeria. They discovered that most universities in Nigeria do not have e-learning library domain and lacked ICT facilities. The reasons given for the various problems were cost and unawareness of the benefit of e-learning by students and lecturers. E-learning is actually a cost effective activity when properly managed. Nigeria being a developing country with many underlying issues should opt for an e-learning platform that will be available and accessible.

The need for e-learning in Nigeria

Nigeria is a country with high level of uneducated people. According to the minister of education, Adamu Adamu, 30% of Nigerian population cannot read or write. This he suggested will hamper Nigerians aspiration to achieve National development (Adedigba, 2017). One of the reasons for this level of illiteracy is low socio economic status of many Nigerian citizens. However, e-learning can be introduced as a means of meeting the needs of millions of Nigerians who cannot afford to go to a face to face school; those whose occupation could not allow them to enroll in a traditional school and those whom early marriage prevented from going to school. Below are the importance of e-learning to education.

- It provides more active learning classes: In e-learning, students are given the opportunity to learn with images and virtual animations. This keeps them engaged and involved, eliminating boredom and frustrations. It is also noted that e-learning fosters interaction between students and content, other students, teachers and outside experts (Alghamdi, 2013). This interaction helps to expand students' knowledge and put them at the center of learning.

- Diversified teaching methods: E-learning encourages the use of diverse teaching methods in explaining concepts. For instance, in the teaching of the development of a baby from fertilization to maturity; a teacher with the use of virtual animation,

engages students through discussion, questioning and exposition of the concepts. This process brings about students' involvement and concrete attention on learning.

- Flexibility: E-learning gives students the opportunity to study at their own pace. It is flexible in the sense that students can decide to spread eagle their learning over a period of time or undertake it at once. The flexibility of e-learning helps to accommodate diverse learners' interest.

- Reduce cost: E-learning provides education at a lower cost than any other form of teaching delivery. It reduces the cost of transportation since it can be done from anywhere at any time. It completely eliminates the cost of books as it uses only software copies, also school fees are highly reduced. Learners can attend the teaching sessions right from their home or place of work. This gives them the opportunity to do so many things at the same time. Through online learning one can engage in various programs at the same time, such as running two or more courses from different universities within the same period.

- E-learning helps teachers manage their teaching materials. The problem of having so many paper works such as lesson notes, attendance record, punishment record and so many other school records becomes a thing of the past since all relevant information related to teaching and learning are housed in one place(internet and computer). The effect is that teachers will be in a better position to manage themselves and their work.

- Effective: E-learning can be as effective as face to face teaching. Joshi and Babacan (2012) noted that teachers can make it effective through intellectual stimulation, salient questions, ethical options and resources for further inquiry.

- Visual simulation: This is the visual representation of data obtained through simulation. It has to do with modeling a real world environment in a simplistic way so as to help a learner develop an understanding of the concept. E-learning facilitates learning through the provision of visual simulation.

Types of e-Learning

There are three main models of e-learning identified by researches namely:

Synchronous-learning: This is the type of e-learning where students are engaged in teaching and learning at the same time through live chatting, video conferencing and live streaming lectures(Wikipedia, 2013).It is a virtual classroom that allows students to discuss with their teachers and also their colleagues. Students can ask real questions and receive immediate answers through instant messaging. There is usually a lot of interaction among students and teachers, specific time schedules are set for assignment and exams.

Asynchronous e-learning: This model does not occur at the same place or at the same time. This method gives students the opportunity to discuss with their teachers as well as themselves over the internet. Students usually study at their own pace. This method makes use of email, social media platforms, posted lecture notes, streaming video content, message boards which allow learners to post questions and comments. In this approach you "read at your pace, view on your time and complete based on your understanding' (TBS, 2020). Asynchronous e-learning makes the materials available while you complete them at your convenience.

Blended learning: A combination of traditional classroom instruction and instruction mediated by technology. It requires the physical presence of both teacher and student in a classroom environment with computer-mediated activities for content (Strauss, 2012). The teacher facilitates the learning process by monitoring, coaching and instructing.

E learning as a supplement to face to face learning in Nigerian Schools

Traditional/Face to face learning approach is common in most Nigerian schools and has been the standard for a long time. It involves students sitting quietly at their places in the classrooms and listening to their teachers teach. The system requires that students be taught at the same time. This results in students who are not quick learners fail, rather than being allowed to succeed at their own pace (Billposer, 2020). According to Lujan and Dicarlo (2006) traditional teaching involves teachers telling students what they know and expecting students to simply commit those facts to memory. However, learning is not all

about putting a set of facts to memory, but the ability to use resources to find, evaluate, and apply information (Lujan & Dicarlo, 2006). That notwithstanding, we cannot hang our educational system on face to face learning approach alone, there is need for schools to explore the rich benefits of e-learning. E-learning provides access to more information than any teacher or lecturer. It has been proved to be effective, accessible, open and tailored to the individual needs of the students (Ma, 2020).A combination of e-learning and face to face learning gives students the best of both worlds. The theory behind this, is that where e-learning fails, the latter can substitute and vice versa.

Some of the advantages of blending e-learning with face to face learning approach according to (Real Indiana Educators, 2020) are as follows:

- It provides flexibility in the presentation of content. A teacher could treat complex topics in the classroom while simpler topics can be available online.
- It improves student- teacher communication. The sense of dependency that comes from virtual learning makes students more willing to ask questions and participate in class sessions.
- Online teachers can point students to links that will help them grasp concepts better and be more interested in the lecture.
- It prevent students from falling behind in case of absence from school. Teachers could use online classes to supplement for a student who could not come to school as a result of illness or otherwise.
- With the mixture of online and face to face, parents can be more involved in their children's academic progress and finally, it helps to sharpen students, teachers, and parents digital skills by making them acquire digital literacy as a way of being ready for school.

Conclusions:

E-learning has become an inherent part of our learning process. It fosters collaboration among students which can expand their store of information and knowledge. It is flexible, interactive, cost-effective and efficient. It engages students interest and help them learn at their pace. E-learning comes in synchronous, asynchronous and blended forms. Nigeria as a developing nation should adopt the blended e-learning style because it gives the instructor the benefit of repackaging the learning modalities to suit our peculiarities.

Recommendations:

This study recommended that government should:

- subsidise the cost of laptops for students, as a means of encouraging them to acquire one.
- Government should also provide constant supply of electricity and internet connectivity both in urban and rural areas.
- The Ministry of Education should provide continuous training and retraining programs for teachers on how to use eLearning software.

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