E-LEARNING EDUCATION IN THE 21ST CENTURY BENEFITS AND CHALLENGES

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Abstract
Education is beginning to undergo a dramatic transformation in terms of design and delivery, and more viable alternatives to the traditional classroom-based model. Education delivery is adopted based on the exploitation of possibilities offered by the new technologies. E- Learning as a method of instruction that takes place across territorial boundaries, necessitated by COVID is a new normal in the education sector. This study exposes the challenges and Benefits of Electronic learning. Education supported by ICT allows the inclusion of individual creativity and performance in the learning process. Electricity, time bound, less face to face interactions were identified as challenges .Study affirmed that, eLearning platform leverage the internet technology to make educational content available also delivering instructions via e-learning has resulted in the reduction of students costs while improving the quality of teaching and learning. More so adopting it as a method of teaching and learning in this 21st century will assist physically, mentally, and psychologically challenged citizens who cannot attend conventional educational institutions to have the opportunity of acquiring education right in their rooms.
Keywords: *Benefits, Challenges, education, e-Learning*

Introduction

Everywhere education, be formal, informal or non-formal, helps the socialization and re-socialization of people. It enlightens them and gives them the knowledge and conviction they need for success in this era of globalization. Education helps in the evolution of every society. Before now, education was primarily didactic and virtually controlled by teachers; they focused primarily on the basic skills as they teach the 3Rs - Reading, writing, and arithmetic. But by the beginning of the 19th Century, change was on the horizon (Mishra, 2005). Mangal and Mangal (2009) observed and stated thus: "Teaching and learning that entirely happen to be a domain of the human factors teacher and student is now no longer limited to its traditional boundaries or ways or means". The traditional method of education is in constant transformation, and the old ways of teaching and learning are in constant change.

Advancement of computer, multimedia and network technologies, alternatives to traditional classroom learning has been developed. 'Electronic learning' also known as E-Learning is one such alternative where students can access course-related materials via online computer systems. E learning is usually associated with the use of computers but generally, it is a form of instructional

delivery which can be provided through any appropriate electronic media such as the mobile learning, television, radio, etc. E-learning is enhanced, supported or assessed by the use of electronic media. E-learning may involve the use of new or established technology and /or the creation of new learning material; it may be deployed both locally and at a distance. However, Mangal and Mangal (2009) finally affirmed and defined present day e-learning as "A learning carried out, supported and facilitated by the advanced multimedia facilities as well as Internet and Web technology delivered to the end-users via computers, laptops, and mobile ICT appliances:

The term e-learning has been defined differently by scholars based on their perceptions in the field. Thus, the under-listed terms, noted by Islam, Chowdhury, Islam & Islam (2009) have been interchangeably used in their place.

i. Web-Based Training (WBT),
ii. Online Learning (OL)
iii. Computer-Based Learning (CBT),
iv. Online Resource-based Learning (ORBL),
v. Networked Collaborative Learning (NCL),
vi. Computer Supported Collaborative Learning (CSCL), etcetera.
Consequently, the letter "E" represents an abbreviation for electronic; while e-learning is defined by Sudarsana et al., (2019) as any web-based education driven by web technology. Arkorful and Abaidoo (2015) conceptualized electronic learning as a situation that emerged in a formal context and utilizes a variety of multimedia technologies to offer instructional programs to distant learners. The e-learning instructional strategy can take place in either offline or online platforms (Al Rawashdeh et al., 2021). It is a learning system based on formalized teaching that is aided by electronic resources, such as the use of computers and Internet technology. Whether called systems devices, electronic resources, multimedia technologies, and web technology, they are electronic or digital tools that generate, store, or process data that are employed to deliver instructions (Teach with digital technologies, 2019). E-learning is an asynchronous form of e-learning. The synch has comprehensive features that allow for interaction learners.

Education

Learning is a basic human right and the Universal Declaration of Human Rights has recognized and adopted it since 1948. Education is a very useful and necessary tool for the development of any nation and individual in a given society.The educational system in Nigeria is faced with the challenges of teaching and learning during the period of a covid-19 pandemic. Almost all activities in the country's educational system came to an abrupt stop. In person teaching and learning was put on hold while information communication technology was hurriedly introduced in teaching and learning to transform the traditional enhance technological methods of imparting knowledge to diversified learners in the 21st century.Education or teaching involves the process of assisting the learner to gain useful skills, attitudes, knowledge, ideas; values in an arranged or unarranged environment that will assist the learner to become an acceptable person to society as well as be independent in life, while learning is the relatively permanent change in a person's knowledge or behaviour due to experience Osuala and Ezechukwu (2019). Teaching is the specialized application of knowledge, skills and attributes designed to provide unique service to meet the

educational needs of the individual and of society. The choice of learning activities to be undertaken to ensure that the goals of education are realized in the school is the responsibility of the teachers. The ultimate aim of teaching is to bring about learning, therefore, a teaching process that does not result in learning is of no use. The face-to-face interaction between teachers and students in the classroom is called traditional method of education. The traditional methods of education are no longer able to meet the needs of today's learners. The over dependence on the traditional methods of teaching and learning are not adequate, especially in this period of COVID-19 pandemic that discourages sitting close which is the basic element of traditional methods of teaching and learning. Empirically, Ogunode (2020) conducted a study to investigate the effect of the COVID-19 pandemic on higher institutions in FCT, Abuja, Nigeria. This result also disclosed that 100% of the people sampled agreed that adoption of online education is a measure to reduce the impact of COVID-19 on higher institutions in Abuja. Iproject master (2020) conducted a study that examined the impact of covid-19 on education in Nigeria. The findings of the study revealed that Covid-19 pandemic had notable negative impact on education in Nigeria. The study of Ukata (2020) revealed that teaching and learning in traditional classrooms during COVID-19 pandemic can posed lots of challenges to both students, teachers, non-academic staff, and management.

Need for E-learning in the 21st Century

Teaching and learning can take place in or outside the classrooms. E-leaning can be termed as a network-enabled transfer of skills and knowledge, and the delivery of education embraces a large number of recipients at the same or different times. Before now, students must be in the classroom to learn, travel far distance to buy textbooks, access the library for information and have to be physically present to submit same. The changes in education have led to learners being the center of concentration in teaching delivery. Learners are at their utmost best when exploring with E-learning devices.E-learning education has bridged the gap; educational material is ideal for hard-of-hearing students because it can accommodate textual information and visual information, such as sign language. Electronic learning, particularly online learning environments as acknowledged by Gilbert (2015) and Songkram, et al., (2015) do provide flexibility and offer students personalized learning opportunities Students/learners have the opportunity to express their thoughts without judgment or interruptions (Er et al., 2009)

The extent to which e-learning assist or replaces other learning approaches is varied ranging on a continuum from none to fully online distance learning. Bates and Poole(2013) in open or distance learning, where there is no compulsory attendance, students depend heavily on technology. In support of the above, Salloum & Al-Emran, (2018); Salloum, et al., 2019; and Alghizzawi, et al., (2019) identified the inclusion of different devices such as mobile phones, personal computers, and tablets as some of the major advantages of e-learning instructional strategy.Knowledge is not static is dynamics. There is an urgent need to enhance citizens' education by engaging in lifelong learning, which is currently being powered by network technologies of the 21st Century. Inegbediomn (2019) noted that digital learning involves the combination of e-learning, online learning, multimedia such as videos, digital cameras and blended learning. Devices and tools can be blend for effective, efficient quality delivery. For instance there could be a blend of e-learning,

digital learning and virtual learning. In the same manner, learning could blend to have open learning or open schooling which is synonymous. A school or education with open schooling provides an open door policy with minimal or no entry requirement and may use a specific method of delivery such as distance education. In most flexible way of learning, the learner can choose the most convent to him in teams of location, time, place, mode of access, method of instruction and other factors relating to learning. Open learning or open schooling removes barriers to education (Inegbediomn, 2019).

As the world strives to meet development, the potential of e-learning to meet the growing educational level , the stage is set for e-learning for effective teaching and learning. There is an urgent need to enhance citizens education by engaging in lifelong learning, which is currently being powered by network technologies of the 21st Century. E-learning caters for different types and varieties of learning approaches by utilizing much interactive content available on the internet. The changes in education have led to teaching geared towards learners centeredness and have assists or replaces other learning and teaching from none to fully online distance learning .Chen, et al., (2005) also foresaw a better prospect for e-leaning due to the improved speed of the Internet and other tehno1ogical advancements and improvements. Lalani (2020), observed that the use of e-learning platforms have enabled teachers in the university to reach more students effectively through technological tools. such as video meetings, cha groups, document sharing and voting platforms, and the quiz and tests during the pandemic and also believing that the traditional learning modules can go hand in hand, then, there is high hope that e-learning will be the hope of the common people in the years ahead in Nigeria.The following were identified as the prospect of e-learning in secondary school by Ani (2019) using e-learning makes it easy to control large class; e-learning enable the learners to learn at his own pace as it encourages individual learning, e-learning makes teaching and learning effective and efficient etc

Benefit of e- Learning

i.   E- learning provides opportunity for everybody to study irrespective of your location.
ii.   Increases learners self confidence : an e-learning environment helps learners to employ new area , the instructors are no longer the solitary knowledge source rather they serve as guides and advisors.
iii.   It takes care of multitude of learners who benefit instantly in E-learning lecture.
iv.   Individuality : Gives a direct answer to issues by concentrate on individual learners.
v.   Learners are highly motivated and spaced based on their individual needs and interests.
vi.   Learning is not time-bound as practiced in the conventional institutions
vii.   e-learning provides equal access to information to all participants regardless of the users' locations, ethnicity, races, and ages.
viii.   Effective reading skills are much emphasized than listening.
ix.   Lessons can be recorded and added to an E-library. Using the archived e-library, students

x.   Can access and replay the teacher's lectures as many times as necessary to master the material.
xi.   Using technology helps student to individualize instruction irrespective of their learning style;
xii.   Use of technologies has enhanced research collection and analysis.

xiii.   E-learning allows students/learners to enroll in any desired course(s) as the choice is not limited to one institution as in the traditional setup. There are no admission restrictions and geographical limitations of choice as per institutions

xiv.   With the use of e-learning technologies , restrictions are eliminated, allowing individuals globally to virtually complete training and courses of their choice.

 xv.   The paperless nature of electronic teaching and learning saves time, cost, and space.

Challenges of e- Learning

There are many challenges encountered by students, teachers, workers and users of these e-learning technologies in our country ranging from :inadequate power supply, lack of e-learning infrastructures, equipments, poor maintenance culture, lack of trained expertise etc. Oriji and Nwaizugbu (2022) outlined the challenges of e-learning as an online instructional delivery method:

i.The simultaneous nature of instruction does not give learners adequate time to reflect on issues.

ii.   High bandwidth is required for video and teleconferences lectures.

iii.   Lack of network connectivity, especially those that dwell in remote areas.

Iv   Irregular supply of electricity may pose more problems to synchronous e-learning, particularly in Nigeria where electricity supply is at its lowest ebb.

v.   E-learning may not be ideal for learners who already have busy time schedules as it is time-bound, and may not be at the learners' convenience as there is no flexibility of time. Learners would have to set aside a specific time slot in order to attend a live teaching session or online course in real-time(https://www.talentlms.com/elearning/synchronous-vs-asynchronouse-Learning)

vi. Arkorful and Ahaidoo (2015) noted that since this is held online, it will reduce the possibility of restricting illegitimate activities such as; cheating, plagiarism, etc.

vii. Gilbert (2015) highlighted that most of the students wish to work autonomously to avoid the need to interact with their classmates.

viii. Rashid et al., (2016) noticed that environmental factors can be one of the disadvantages of asynchronous e-learning to both that can probably influence their overall performance as a student (Rashid et al., 2016).

ix. E-learning is virtually based on technology, hence, Ornstein, et al., (2016) identified that educators face numerous problem integrating ICT in their classroom.

x .Agyei and Voogt (2015) also identified software issues as one of the problems, arguing that most of the software applications (databases, spreadsheets and word processing) used in schools today were not originally developed by teachers, but were designed for business purposes and not for education, thereby making it difficult for many teachers to use in the teaching-learning process due to technological incompetence.

Conclusion

E-learning is important for building a technologically literate workforce, and for meeting society's continuous need for rapid lifelong learning delivered in progressively more convenient forms. E-learning ensures that students are completely involved as learning takes place together with texts, videos, sounds, collaborative sharing, and interactive graphics. It enhances the quality of teaching

and learning. we can observe that the use of e-learning has led to a shift in curriculum implementation techniques for both teachers and students; teachers started giving lectures and using online methods as well as structuring their evaluation methods virtually. This is a temporary break in the causality loop, but this break needs to be further structured and institutionalized.

Recommendations

1. Government and other stakeholders should provide a proper orientation for citizens, teachers and students through seminars, workshops, conferences and discussion on how to utilize E-learning.
2. Power supply and internet services should be available to all and free irrespective of geography.
3. Government should provide ICT tools to schools as recommended instructional materials prescribed by the National Policy on Education.

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