

UTILIZATION OF E-LEARNING IN PROMOTING TEACHING AND LEARNING IN NIGERIA TERTIARY INSTITUTIONS IN POST COVID ERA- CHALLENGES AND WAY OUT

BY

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ABSTRACT

Teaching and learning in educational institutions in Nigeria are currently based mainly on traditional methods, That is, they follow the traditional face-to-face interaction in classrooms. Although many academic units have also started blended learning, yet a lot of them are stuck with old procedures. The sudden outbreak of the deadly disease, Covid-19, caused by a Corona Virus (SARS-CoV-2) affected the entire world. The World Health Organization declared it as a pandemic. This situation challenged the education system across the world and forced educators to shift to online mode of teaching overnight. Many academic institutions that were earlier reluctant to change their traditional pedagogical approach had no option but to shift entirely to online teaching-learning. This paper discusses the important place of e-learning, concept of corona virus, problem associated with e-learning teaching as a panacea to tackling the spread of covid-19 and its way forward.

Keywords: Corona virus covid-19, E-learning, Education, Technology

Introduction

The deadly and infectious disease Corona Virus also known as Covid-19 has deeply affected the global economy. This pandemic has also shaken up the education sector, and this fear resonated across the education sector globally. Covid-19 pandemic outbreak forced many schools and colleges to remain closed temporarily. Several areas were affected worldwide and there was the fear of losing the then ongoing semester or even more in the coming future. Various schools, colleges, and universities have discontinued in-person teaching. As per the assessment of the researchers, it is uncertain to get back to normal teaching anytime soon. As social distancing is preeminent at this stage, this will

have negative effect on learning opportunities. Educational units are struggling to find options to deal with this challenging situation. These circumstances make us realize that scenario planning is an urgent need for academic institutions (Rieley, 2020). This is a situation that demands humanity and unity. There is an urgent need to protect and save our students, faculty, academic staff, communities, societies, and the nation as a whole. Unfortunately, the educational sector is at the receiving end. According to UNESCO (2020), an estimated 1.725 billion learners have been affected as a result of school closures, representing about 99.9% of the world's students population as of April 13th, 2020.

The educational system of the world was halted because of physical distancing and the lockdown. The conventional paradigm of teaching failed and teaching/learning suffered a severe setback all over the world including Nigeria. Teaching and learning in science education are evolving. Many decades ago, in Nigeria the conventional methods of teaching holds sway in the educational sector (Aina & Langenhoven, 2015). However, E-learning as an aspect of ICT is relatively new in Nigeria's educational system. The world is not static but dynamic and technology is changing human endeavors rapidly. Along with the changes are various challenges the human race is facing which makes our education fragile and weak such as the current problem Of COVID-19 pandemic. The pandemic has exposed the weakness in teaching and learning in Nigerian schools because the typical teaching paradigm has failed in Nigeria, The period of COVID-19 pandemic is a typical example of times when conventional teaching paradigm could not work in schools. During this period, as a measure of physical distancing, students and teachers are not allowed to interact physically. Schools were closed down for many months thus teaching and learning are disrupted (UNESCO, 2020).

Concept of E-Learning

E-learning can be termed as an approach that makes the teaching–learning process more student-centered, more innovative, and even more flexible. E-learning is defined as “learning experiences in synchronous or asynchronous environments using different devices (e.g., mobile phones, laptops, etc.) with internet access. In these environments, students can be anywhere (independent) to learn and interact with instructors and other students” (Singh & Thurman, 2019). E-learning in education is the wholesome integration of modern telecommunications equipment and ICT resources, particularly the internet, into the education system. Shavinina (2001) sees ICT as all the digital technologies, including: computer, scanner, printer, telephone, internet, digital satellite system(DSS), direct broadcast satellite (DBS), pocket switching, fiber optic cables, laser disc, microwaves and multi-media systems for collection, processing, storage and dissemination of information all-over the world.

Tertiary Education in Nigeria

Tertiary education refers to all formal post-secondary educational institutions, including public and private universities, colleges, technical training institutes, and vocational schools. Tertiary education is instrumental in fostering growth, reducing poverty, and boosting shared prosperity. A highly skilled workforce, with lifelong access to a solid post-secondary education, is a prerequisite for innovation and growth: Well educated people are more employable and productive, earn higher wages, and cope better with economic shocks.

Tertiary institutions benefit not just the individual, but society as a whole. Graduates of tertiary education are more environmentally conscious, have healthier habits, and have a higher level of civic participation. Also, increased tax revenues from higher earnings, healthier children, and reduced family size all build stronger nations. In short, tertiary educational institutions prepare individuals not only by providing them with adequate and relevant job skills, but also by preparing them to be active members of their communities and societies.

As the youth population continues to swell and graduation rates through elementary and secondary education increase dramatically, especially in regions like South Asia, Sub-Saharan Africa, Latin America, and the Middle East and North Africa, there is an intensifying demand for expanded access to tertiary education of good quality. Tertiary technical and vocational education and training can provide an effective and efficient complement to traditional university studies in providing students with skills and knowledge relevant to the labor market.

Covid-19 Pandemic, its Spread and its Effects on Humanity

The Covid 19 pandemic, also known as the corona virus pandemic, is an ongoing global pandemic of the corona virus disease 2019 (Covid 19) caused by severe acute respiratory syndrome corona virus 2 (SARSCOV-2) (UNESCO, 2020).

The novel virus was first identified in Wuhan, China in December 2019; a lock down in Wuhan and other cities in Hubei province failed to curtail the outbreak and it spread to other parts of mainland China and the world at large. The World Health Organization (WHO) declared it a public health emergency of international concern on 30th January 2020 and a pandemic on 11th March 2020. Since 2020, variants of the virus have emerged and become dominant in many countries, with The Delta, Alpha, and Beta variants being the most virulent. As of 21st September 2021, more than 229 cases and 4.7 million deaths have been confirmed, making it one of the deadliest pandemics in human history.

The pandemic has resulted in severe global, social and economic disruptions, including the largest global recessions since the Great Depression of the 1930s. It has led to widespread supply shortages exacerbated by panic buying, agricultural disruption, food shortages, and decrease emissions of pollutants. Numerous educational institutions and

public areas have been partially or fully closed, and many events have been postponed or cancelled. Information has circulated through social media and mass media and political tensions have been exacerbated. The pandemic has raised issues of racial and geographic discrimination, health equity, and the balance between public health imperatives and individual rights.

On 20th September 2021, it was reported that the COVID-19 pandemic had killed about 675,000 individuals in the US just like the 1918 Spanish Flu killed many people during its era. COVID-19 (Corona virus) has affected day to day life and is slowing down the global economy. This pandemic has affected thousands of peoples, who are either sick or are being killed due to the spread of this disease. The most common symptoms of this viral infection are fever, cold, cough, bone pain and breathing problems, and ultimately leading to pneumonia. The virus is spreading exponentially region wise. Countries are banning gatherings of people to the spread and break the exponential curve. Many countries are locking their population and enforcing strict quarantine to control the spread of the havoc of this highly communicable disease.

COVID-19 has rapidly affected our day to day life, businesses, disrupted the world trade and movements. Identification of the disease at an early stage is vital to controlling the spread of the virus because it rapidly spreads from person to person. Most of the countries have slowed down their manufacturing of products. Many industries and sectors are affected by the spread of this disease. These include the pharmaceuticals industry, solar power sector, tourism, information and electronics industry. This virus creates significant knock-on effects on the daily life of citizens, as well as about the global economy. Presently the impacts of COVID-19 in daily life are extensive and have far reaching consequences. These can be divided into various categories as follows:

- 1. Health Care Effects:- The health care effects of Covid-19 include** challenges in diagnosis, quarantine and treatment of suspected or confirmed cases, high burden on the functioning of the existing medical system; patients with other diseases and health problems being neglected, doctors and other healthcare professionals who are at a very high risk are overburdened, overcrowding in medical shops; requirement for high protection, and disruption of medical supply chain (Blocken, Malizia, Vandruenen and Marchal, n.d).
- 2. Economic Effects: The economic effects of Covid-19 include:** slowing down of manufacturing of essential goods; disruption of the supply chain of products, losses in national and international business; poor cash flow in the market, and significant slowing down in the revenue growth ((Blocken, Malizia, Vandruenen & Marchal, n.d)
- 3. Social Effects: The social effects of Covid-19 include:** service sector not being able to provide their proper services; cancellation or postponement of large-scale sports and tournaments; avoidance of national and international travellings and

cancellation of services, disruption of celebration of cultural, religious and festive events; undue stress among the population, social distancing with our peers and family members; closure of hotels, restaurants and religious places, closure of places for entertainment such as movie and play theatres, sports clubs, gymnasiums, swimming pools, and so on; and postponement of examinations.

Challenges in the Use of E-Learning in Tertiary Educational Institutions in Nigeria

Despite the effectiveness of e-learning in guarantee continuity and quality in teaching and learning in educational institutions, it is not without challenges. Discussed below are some of the challenges facing the utilization of e-learning in the teaching learning process in tertiary educational institutions in Nigeria.

Unstable power supply: The first challenge to be addressed in relation to deploying e-learning into teaching and learning in Nigeria's tertiary institutions is unstable power supply. This is because of the current epileptic state of power supply in Nigeria as a country. This poses a major threat to the effective utilization of e-learning facilities and equipment as many teachers and students will spend so much on generator and fuel usage and this will eventually discourage them from continuing using e-learning facilities.

Network problem: The unpredictable network problem is another issue here as some areas in the country may have network problems at different, or sometimes all, times of the day.

Internet Access (Data subscription): The rate at which the data subscribed to are deducted is quite alarming and this can be a major drawback as teachers and students will need to be subscribing from time to time so that they can stay connected to online classes.

Affordability of learning equipments (smart phone): Not all students, and even teachers, have, and can afford smartphones because some parents are still struggling to fund their children's education and may not provide smartphones for them at some point in their studies. The poor salaries paid to teachers may make smartphones unaffordable to so many of them.

Lack or Inadequacy of technical knowhow: Since it is not teachers or students that are knowledgeable about some of the platforms, some people will need training, guide or help in order to use the platforms successfully.

Duplication of courseware on different learning platforms: Since the various e-learning platforms offer similar services, the materials, courseware and lecture notes may be available on all the platforms thereby duplicating the learning materials, and by so doing create confusion for the learners as to which to select from the many materials available.

Unexpected shutdown of any of the e-learning platform will lead to obstruction in learning.

Some technologies and applications have either been bought over by new people

with new terms and conditions or go into extinction fully. In either case, there is a difficulty using the technologies.

Possible Solutions to the Problems

The government should be prepared fully to adopt the paradigm shift without any political bias.

The government should make adequate money available to strengthen and develop the Nigerian broadband infrastructure.

There should be proper monitoring to ensure that right software and hardware are purchased and adequately installed in every higher institution.

Academic personnel of every institution must be adequately trained through seminars, workshops and conferences.

Those who are not computer literate enough should be adequately empowered to update and upgrade their ICT knowledge.

Conclusion

The paper discussed issues related to the utilization of e-learning in promoting effective teaching and learning in tertiary institutions in Nigeria in post-covid 19 era. It is the submission of the authors that if e-learning will be creatively adopted with all the proposed strategies in dealing with the challenges involved, it will make the approach to gain wider acceptance and at the same time improve the quality of teaching and learning in Nigeria's tertiary educational institutions.

Recommendations

In addition to the solutions to the challenges highlighted above, the following recommendations are made in the light of the foregoing challenges discussed:

Technical difficulties should be addressed through prerecording video lectures, testing the content, and always keeping plan B ready so that the teaching-learning process will not be hampered.

Online courses should be made dynamic, interesting, and interactive.

Teachers should set time limits and reminders for students to make them alert and attentive.

Efforts should be made to humanize the learning process to the best extent possible.

Personal attention should be paid to students so that they can easily adapt to this learning environment.

Social media and various group forums should be employed to communicate with students.

Communication is key. When it gets difficult to try reaching out to students via texts, various messaging apps, video calls, and so on content should be such that

enable students to practice and also own their skills.

Online programs should be designed in such a way that they are creative, interactive, relevant, student-centered, and group-based (Partlow & Gibbs, 2003)

Educators must spend a lot of time in making effective strategies for giving online instructions. Effective online instructions facilitate feedback from learners, make learners ask questions, and broaden the learners' horizon for the course content (Keeton, 2004).

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