

Achieving Educational Sustainability In Nigeria Via E-Learning In A Pandemic Period

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Abstract

Education is power and a veritable tool for the advancement and development of every growing nation like Nigeria. Any process that obstructs the acquiring of knowledge and idea that shape peoples attitude, actions, and achievements should not be allowed or sustained. In the recent pandemic period in Nigeria, opportunities for students to learn formally have been terminated and this is capable of crumbling the development of any nation. E-learning method is a process that cannot be obstructed, a programme done conveniently, at the comfort zone of learners and a process that encourages continued education. Against this backdrop this paper intend to explore e-learning as a tool for educational sustainability in the COVID-19 pandemic period in Nigeria, advantages of e-learning, implication on educational practices in Nigeria. The education Minister should not just propose the utilization of e-learning but government should enforce and fund it. There should be an online and onsite capacity building that would include training and retraining programmeme for teachers on the utilization of e-learning for teaching and learning as well as strategies required for its utilization and maintenance, towards sustainability.

Keywords: E-Leaning, Coronavirus Pandemic, Education, Sustainable Development

Introduction

That formal education is a vehicle for the development of the individual vis-à-vis national development is a verified fact. According to Joseph & Iorlaha, (2017) formal education is universally recognized as a veritable tool par excellence for the development of the individual and achievement of national goals. Education is a process that develops learners' scope morally, emotionally, physically, intellectually in order for them to make a meaningful contribution to the society they find themselves. It is also a learners' self-development and reliant process that enable its recipients function independently and enable them give back to the society in a large form, what the society gave to them. This process of nurturing learners' ability both intellectually, emotionally, physically, and morally is a continuous process that is majorly done in the four walls of a school environment. In this process of learning, learners of different categories come together to learn together and learn from among themselves.

Formal educations in Nigeria have been suspended since the 23rd of March 2020 as a result of the COVID-19 pandemic (Enoabasi, 2020). The discontinuation of an education should not be an option for any developing nation as that will slow down its development. Indeed there must be continuity in the educational process. There are other means that knowledge can be transmitted which other nations have been actively exploring during this challenging period. The era of the pandemic is a tough period for the entire world community because of the wide spread virus that goes round the whole world, which has resulted in high mortality and morbidity rate. It is a virus without any form of treatment, whether in the form of a drug or vaccine. The virus has disrupted the nation's communal living and other forms of development. Indeed, since the outbreak of the covid-19 pandemic in Nigeria, there have been panics, and a high rate of death recorded which has obstructed the functionality of every facet of the Nigerian economy and the educational system.

Anthony, (2020) observed that immediately after the first coronavirus case was identified in Nigeria, the Federal government ordered closure of all schools in Nigeria. The resultant effect was an obstruction of all academic activities in Nigeria, from primary, secondary, and the tertiary level of education. Such activity includes internal terminal

examinations, external examinations as well as other educational activities in tertiary institutions in Nigeria. However the coronavirus pandemic should not delay formal education in Nigeria as the world is a global village. As a global community every child should have equal opportunity to formal education (Adediran, & Yunisa, 2015). This is in agreement with Ejiele, (2004), who stated that the provision of equal educational opportunity will enhance access to education for all citizens. The present educational situation in Nigeria violates the etiques of equal education to all citizens and the codes of national development. If this educational situation in Nigeria is left unattended to, it will result to brain rust and educational retrogression in Nigeria and the resultant effect will be national retrogression.

As a global world one major strategy that is capable of defeating this impending national retrogression in Nigerian educational system is the embracing of the E-learning system of knowledge acquisition. The e-learning system is platforms that will enable learners enjoy and access a hitch free formal educational process even during the coronavirus pandemic period. It is a process that will enhance learning, adequate assessment and evaluation. It is against this backdrop that this paper attempts to examine E-learning as an alternative a educational arrangement during the pandemic period in Nigeria.

Concept Education

The concept of education is under two major categories, formal education and informal education. Informal education is the process of training or education given to a growing child by their elders or parents from the home environment without a standard curriculum or testing mechanism for evaluation while, formal education is the combinations of training or education a child receives from a formal setting with a tangible curriculum, testing mechanism or standard assessment technique for learners evaluation. It is a formalized structure and mood of teaching/training, and evaluation that is usually certified. Education according to Hamidu (2013), posits that education is the complete mental and physical transformation of a person as a result of the structured mood of training that the person acquire to be more productive in a given society (Ishaku & Baba, 2017).

Ogboji (2003) defines education as the transmission of worthwhile values in morally acceptable manner involving knowledge and understanding and some kind of cognitive perspective. These definitions of education reveal that education equips learners with basic skills, abilities, knowledge, attitudes for the personal development in particular and the society in a general sense. Education has been and will continue to function as an effective tool for national development and it is a procedure that exposes individual learners' positive attitudes, capabilities, skills, knowledge and other useful habits that will be of great value to the society. The process of educating an individual is a long term project that should be continued and not discontinued for any reason as it plays a vital role in bring national development. Also, it is a process that enables individual learners to give back or share with the society what the society has given to them. It is fact that the role of education cannot be overemphasized in a contemporary society like Nigeria. Therefore, education should be encouraged, dynamically assessed and provisions should be made for accessibility. In an era where information have become very assessable as a result of electronic learning device it will be a deliberate lack of negligence if any agency of education is closed and education lockdown, for education lockdown or delay is the extinction or delay of national development.

Concept of E-Learning

The concept of e-learning emanated from Computer-Assisted Instruction which is made up of computer drills, practice exercises and tutorials sequences open to learners. This concept of computer-based Assisted Instruction appeared for the first time in 1955 as a result of efforts put up by educational experts on technology in order to solve various teaching problems (Zinn, 2000). E-Learning is a dynamic platform that promotes quality learning experience that emerged in the 21st century. It could be considered as a natural evolution of distant learning that flexibly utilizes modern tools in the technological context for structuring education. Eze, (2007) explains that e-learning is an electronic learning opportunities that falls under the of Information and communication Technology (ICT) which is a complex electronic hardware's and software's as well as services which can enhance local and global communication.

There are three aspects of ICT as the acronym implies and they include Information, Communication and Technology these are electronic device that promotes the storage and fasten up information and communication around the globe (Ugwu & Nnaekwe, 2019). Since the 21st century, the Use of ICT has become increasingly recognized and used by many all over the world. Guri-Rosenblit, (2005) defines e-learning as the use of electronic media for variety of learning purposes that ranges from teaching, learning and instructions from add-on functions in conventional classrooms to fill substitution for the face-to-face meetings by online encounters.—Koohang & Harman, (2005) describes it to be the delivery of all educational activities through various electronic media. Main while Lee & Lee (2006) saw it as an on-line education that is self-paced or real-time delivery of training and education over the internet to an end-user device. Based on all the definitions examined above, it can be concluded that e-learning is simply a media that enables the accessibility of educational resources and instructions that are readily available at the comfort zone of the targeted learner. Lessons are taken online to educate or train the individual student or a group of students with the aid of modern, wireless or cable connection to access academic course materials and lessons either from a computer, smart phones to mention a few.

Educational Sustainability and Sustainable Development

Sustainable development is a development that meets the needs of the present without compromising the ability of the future generation to meets their own needs (Joseph & Iorlaha, 2017). Every nation makes earnest effort to ensure that sound and functional education is provided to all their citizens. To achieve this lots of resources have been considered both human and material to support and encourage a sustainable educational system that will meet the ever growing needs and aspiration of its members as well as help achieve national development. This is to ensure that all members of a society are accorded quality learning experience that will not only meet their personal needs but also meet the objectives of a developing nation. In other to achieve cohesion within the system and measure up with the diverse socio-cultural and econo-political aspirations of the learners/citizens all the levels of

the educational system in such nations is expected to be well equipped for optimal performance.

According to Oduolowu & Olowe, (2011), an approach to development is that of seeking to balance the different and often competing needs, against an awareness of the environment, social and economic limitations of the society, with the aim of creating a strong, healthy and a just society that is able to meet the diverse needs of all people within the present and future communities, with a view to promoting personal well-being, social cohesion and inclusion, and creating equal opportunity for all. There are three major factors involved in the process of a nations sustainable development and they include; social inclusion, economic growth and environmental steward, (Joseph & Iorlaha, 2017). This factor according to Boyd, (2013) cut across all sectors of development. The conservation of resources for the future generations is a major characteristic that identifies sustainable development policy, from traditional environmental policy, which seeks to internalize the externalities of environmental degradation. This was revealed by Amadi (2013) who opined that sustainable development is the long-term stability of the economy and environment that is only possible by the integration and acknowledgement of economic, environmental, and social concerns through decision making process.

Coronavirus Pandemic in Nigeria: a Panoramic View

According to World Health Organization (2020) a pandemic is an epidemic occurring worldwide or over a wide area, crossing international boundaries and usually affecting a large number of people. The Coronavirus Pandemic in Nigeria has gradually disintegrated the courage and functionality of the great Nigerian people and turned it into morbidity, for many fear for their lives. Coronavirus has become a household name among Nigerians. Even those who lack knowledge of proper pronunciation of the name of the disease are able to make some funny onomatopoeic sound that reflects the sound of coronavirus when properly pronounced. It goes to mean that both adults, children educated and non-educated have become fearful of this virus not knowing the way out. This is because it has presently engulfed almost all the thirty-six (36) states of Nigeria and it is spreading like wild fire. The

Pandemic itself is a wide spread virus that has infected many people round the whole world, with high mortality and morbidity rate. Presently, the virus is without any form of treatment (drug vaccine). This situation has disrupt national communal living and other forms of development.

Since the outbreak of the covid-19 pandemic in Nigeria, there has been panics, and a lot of deaths have been recorded. This has obstructed the functionality of every facet of the Nigerian economy including education. Little wonder why all nations of the world including Nigeria are shorting down, lamenting and crying for divine intervention.-According to Burke & Rourke (2020) Nigeria confirmed the first covid-19 case which was transmitted by an Italian official who came to Nigeria on an assignment. Unfortunately, after the visit of that infected Italian the country has never remained the same. Moreover, since that first case in Nigeria, there have been 12233 confirmed cases, 342 deaths while only 3826 patients have recovered (WORLDOMETER, June, 2020). All over the world there have been over 3million confirmed cases and over 250,000 deaths and have visited and infected over 212 countries in the world. Presently, as never before, there have been world campaigns and enlightenment programmes organized to orient citizens about the ongoing pandemic, protective measures, changing their distorted view of the pandemic and encouraging them to see the need to take responsibility of themselves by taking appropriate action as fast as possible to avoid deaths in the case of carriers. The Nigerian Centre For Disease Control (NCDC) after an extensive research on the Coronavirus, took time to explore a number of avenues that will enable them enlighten the public (Nigerians) with the characteristics of the Coronavirus pandemic which include; shortness of breath, severe respiratory disorder, chest tightness, headaches, fatigue, sore throat amongst others. Lots of precautionary terms have been employed to help Nigerian understand the current pandemic which includes social distancing, gastroenteritis, asymptomatic, coughing into the elbow, 2 meter distancing, alcoholic based sanitizer, hand washing, face mask, hand glove, self-isolation, quarantine, droplets, lockdown to mention a few (Channel Live Television, 2020). These and many other efforts have been made to ensure

that Nigerians understand this pandemic and keep safe. However, this change has caused some economic hindrances that will take time to recover from

Benefits of Exploring the E-Learning Platform

While classroom learning is the oldest and traditional way of learning since the advent of formal education, the e-learning platform has greatly encouraged learning. The traditional learning pattern lack some resources which includes visual aids, audio-visual materials and microphones that can sometimes be epileptic (Leonard, 2014). According to Okolo, (2011) E-learning enable learners to access equal education that develops interest, provide them with varieties of instructional material, facilitates knowledge creation and knowledge dissemination to a wider community. Nwokike (2011) includes that e-learning facilitates the task of teachers by promoting performance, enable teachers and students to study at their own pace, reduces the stress inherent in the conventional classroom works for both teachers and students, facilitates access to existing knowledge and skills and saves teachers and students time and Energy.

- **Convenient and Flexible:** The resources are readily available, anytime and everywhere. The fact that the resources are usually available learners of all categories can learn equally. It is a cheap alternative to classroom learning.
- **Provide Wide Range of Tools for Teachers:** Abundant available instructional materials that are creative, innovative, resourceful are readily available for teachers
- **Cost and Time Saving:** learners do not need to travel to a particular location for lesson to take place like the traditional classroom learning. The time required to access a lesson is much reduced compare to the time required in the classroom learning. Lesson resume without any waste of time and the speed of learning is predictable.
- **It Encourages Collaborative Learning:** E-learning, links learners from all distances and experts together to form an online collaborative learning. This is in agreement

with Alu (2011) who opined that E-learning platform is an effective method of teaching that allows learners active participation.

- **Accommodation of Learners Needs:** the E-learning platform is a programme that suits every learners needs. It is a programme that can be accessed by workers, housewives and the time they are chanced.
- **Review of Passed Lessons:** Learners at any point in time can access previous lessons as many times as possible in order for them to capture the lesson adequately. The videos and audio instructions can be rewind and seen again and again if you happen not to understand it or not attended the lesson at a particular time.
- **It Encourages Effectiveness:** it enhances learning abilities, retaining information for a longer time, and improves scores
- **Availability of Instructional Materials:** the E-Learning platform allows learners to access abundant electronic learning materials. The E-learning Platform provides to learners a 24 hours information that can fortify knowledge acquisition. Could also be called e-library. Ogboji, (2011), had outlined the following benefits of E-learning platform
- **Stress Free Teaching/Learning Process:** It makes learning and teacher process easy and reduces stress for both teachers and learners
- **Encourages Examination preparedness:** It provides learners with examination and self-assessment quizzes which can be scored and learners are able to access their abilities.
- **Easy and Access to Electronic Communication:** It provides electronic communication like Emails and threaded discussion for both teachers and students

Lockdown: Implications on Education in Nigeria

In the statements and chart by McCarthy, (2020) over 80% of the world's population is greatly affected by the nationwide closure of school and that over 1.3billion learners in the world are

not able to attend school or university as at March 23, 2020. Nigeria, since the past six weeks have experience a very challenging period that have not been experienced during the past few years. The covid-19 pandemic has necessitated national lockdown by government sanctions, from the closing down of the international airport, all schools nationwide both primary, secondary and tertiary institutions, as well as churches, weddings, burials, conferences/seminars and other forms of large gatherings as part of attempts to limit the spread of Covid-19 (Yomi, 2020). This has resulted to global economic crisis that may be irrecoverable over a short while. One major sector in Nigerian economy that is greatly affected by this national lockdown is the shorting down of all educational system in Nigeria that was done to contain the spread of the virus. According to the Op-Ed Contribution, (2020) without a doubt, the Coronavirus pandemic has adversely affected all aspect of our lives... that in Nigeria, educational system has been devastated and children from poor families are bearing the brunt of it. While it is an effective strategy to slow down or curb the spreading of the virus nationwide it has crumble the educational sector of the Nigeria economy. The school shutdown has not only affected students but has also affected teachers, families, economy and societal consequences have been experienced (Lindzon, 2020). UNESCO has stated that education in Nigeria is seriously at the receiving end as an estimate of 1.725billion learners have been affected as a result of school closures, representing about 99.9% of the world's student population as April, 13th, 2020. As a matter of fact, the coronavirus lockdown in Nigeria has gravely affected the process of education, and what affects education which includes knowledge impart, attitude change, cultivation of moral values, personal development, abilities and basic skills acquisition is able to adversely affects human transformation that could bring about national development.

E-learning as a Sustainable Development in a Pandemic Period

Following the governmental ban as a measure to contain the spread of the coronavirus, Nigeria is presently, experiencing what is called learning crisis and to submerge this present educational situation, Nigeria must diversify their strategies of learning from the traditional method to modern technological innovations that has long been utilized in other developed

countries. One of such strategy is the E-learning method of teaching and learning providing broad opportunities for testing and assessment in order to evaluate learners academic achievements. UNESCO, (2020) Institute of Statistics recommends that one way to cushion the implication of lockdown on education is to employ the E-learning platform where there is visual interaction that encourages a one-on-one interaction between student and teacher and among students to mitigate academic rust.

It is a platform that includes; open learning programmes, educational applications, for schools as well as teachers that can teach students in rural school area. Some of these online learning platforms that may be harnessed and well utilized are integrated digital learning, learning platforms, video lessons, Massive Open Online Courses (MOOCs), skype, zoom and radio or television broadcasting. The World Economic Forum, (2020) stated that the Covid-19 pandemic has encapsulated our form of education with distinctive rise of e-learning, where teaching is undertaken remotely and on digital platforms. Further stating that research has revealed that online learning has proved to increase retention of information, takes less time, and estimating that 1.2 million children are presently out of school. This educational delay in the country should open innovative privileges that shift learning previous situation from usual classroom learning to a high growth of educational technology. Adrian, (2017) had revealed that some countries have already shifted their educational process to online learning allowing many to have broader access to learning opportunities that where not otherwise possible in the past. Reason being that the online learning platform has become very popular, convenient, and more educative. Even though schools are shutdown in Nigeria learners will no longer be bound to any school location time to learn.

In the recent past, the Minister of education proposed the adoption of e-learning to avoid brain drainage among Nigerian students. According to the minister of education, the purpose of the e-learning programme was to fill the gap created due to the closure of schools nationwide as a result of Covid-19 (Azeezat, 2020). He further stated that the programme will commence with immediate effect with free data subscription as they are in collaboration with

the networking companies in Nigeria. Sadly though, the Academic Staff Union of Universities (ASUU) kicked against the e-learning ideas for some reasons.

- That the e-learning is not just the provision of computers, accessories, power point slides, but rather an entirely internet-based learning that requires certain behavioral change and regulatory adjustments in order to make it work for learners.
- That the Nigerian education system does not have the required infrastructure to commence an online education with immediate effect. For example some supposed smart board supplied originally to schools to enhance e-learning have become damaged because of lack of maintenance and disable internet connections for a long period of time are now marker boarder rather than smart board.
- Degenerated power supply as schools have become generator farm with unavoidable noise pollution in an attempt to maintain some degree of academic services.
- That the E-learning programme depends critically on effective library system with online resources and seamless access from across the globe. There is also no library in Nigeria including the National library that has a semblance of kindergarten library.
- That poverty level in Nigeria will hinder the financing of the online learning as teachers cannot finance it with their meager salary.
- That if the Objective of learning is learners centered, there should be studies to determine the learners' characteristics to e-learning (Gift, 2020).

The above are the few among the sixteen points raised by the Academic Staff Union of Universities (ASUU). In the light of the above the idea of e-learning was discouraged. In all, corruption has played a major role in disenfranchising us from exploring the e-learning as an effective strategy to combat education shutdown in Nigeria.

Many nations have succeeded in keying into the e-learning platform and lots have been benefited. Some of such countries as opined by Adrian are United State which is estimated that about 6 million students study online, Indian is a second country that takes full advantage of e-learning method because of their prevailing economic conditions that may force people to work to make ends meet, putting education on the back seat, china for example has over 70 e-learning institutions and colleges because of the competition in the working sector of their country and so there is a great need to acquire higher education. South Korea is another country with a boosted technological innovations and involvement. The e-learning has been used by these countries to make education a lot flexible, allowing people to study what they want and when they want. Since citizens are supposed to stay at home during this pandemic spread in Nigeria, learners can still access equal, quality, creative and informative education that will enable teachers to evaluate learners' academic achievements and thus certificated. These countries succeeded because they are not corrupt and they are selfless citizens and leaders who have good intensions even when they are not perfect.

Challenges Facing E-Learning Programme in Nigeria

Poverty: As Ekundayo & Ekundayo (2009) puts it one of the constraints facing the adoption of e-learning platform in Nigeria is poverty. Poverty is one major problem facing the commencement of e-learning programme in Nigeria. The Federal Republic of Nigeria, National Bureau of Statistics (2020) had estimated that the national poverty rate in Nigeria is 40.09%. The implication of Coronavirus is therefore, more severe for disadvantaged children and families, causing interrupted learning, compromised nutrition, childcare problems, and consequent economic cost to families who could not work (UNESCO). Cost of installing e-learning equipment can be a limiting factor with regards to reaching a broad target audience and making sure that everyone affords it. The Covid-19 pandemic has greatly increased poverty level in Nigeria as many Nigerian parents cannot afford all technological facilities for internet connectivity.

Limited experts/ Teachers: Suleman, (2012) added that some challenges are lack of laptops, software, poor liberalization of telecommunication market amongst others. Unless computer

teachers not all teachers are computer literates and not all who use smart phones know how to extract information. There few technical staff in schools to maintain current system. Inadequate trained personnel are a challenge to the use of e-learning in schools.

Infrastructural Problem: Which Include high cost of ICT, Poor networking system in Nigeria has also contributed to the constraints affecting the adoption of e-learning in Nigeria (Suleman, 2012). Accessing network everywhere you are is more than what is used in television advertisement “everywhere you go” as one Nigerian Communication company puts it. Sometimes, even when there is internet subscriptions, internet connections are not reliable.

Students: Students must exhibit a measure of interest because in the e-learning platform nobody is forced to learn. Learners must be self-disciplined and willing to learn

Maintenance Culture: It is not enough to supply these educational technological facilities to schools for them to function well and to last long there must be adequate maintenance habits, so that the available systems will not breakdown over a short while.

Low Power Supply: Ekunfayor & Ekundayor also mentions electricity challenge as among the constraints facing the implementation of e-learning system of education in Nigeria. Epileptic power supply in Nigeria has also been one of the major constraints to e-learning as these platforms cannot be fully accessed without steady power supply.

Lack of knowledge: Majority of Nigerians lack knowledge of the effectiveness of e-learning platform. Parents as well as students are only aware of the traditional teaching method and such lack of knowledge can as well hinder the adoption of the e-learning programme.

School Administration: When students’ data are not properly captured from admission point for examples phone numbers, parents phone number, it will be difficult to capture them into the e-learning programme. Some who manage to have smart phones live in remote villages where there is no network. Obviously, only those in urban area in that situation can connect and others who live in rural suffer.

Strategy for Effective Implementation of E-learning in Nigeria

- The government, as part of their palliatives want to make adequate provisions of technological gadgets for e-learning both for teachers and students especially for those who cannot afford such online educational facilities
- Government should make it a priority to ensure that internet connectivity is available to all students in Nigeria and that there is a general local orientation to create awareness about the e-learning programme.
- Nigerian communication companies as part of their contribution to continue education during this pandemic periods should make their networks available, cheap or free especially during pandemic periods
- Steady Power Supply: Power generating companies should as a matter of urgency and as part of their contribution to education during the pandemic periods should distribute steady power that will enable the effective functioning of the available technological facilities in order to enhance education.
- The Government should also organize online training programmes to educate teachers as to how to manage and maintain these available technological instructional materials
- School Administrator should put up more efforts to have and keep records of students' phone contacts as well as their parents contacts for information purposes.
- The e-learning platform is for our future generation, our leaders of tomorrow and a situation where corruption is allowed to hinder the progress of our growing future leaders it is tantamount to selfishness, greed, brutality, and barbarity of the highest degree that is capable of putting developing Nigeria in a state of national development extinction. To be more responsible, we must repudiated corruption.

Conclusion

Education is an important tool that speedily drives every growing nation to a state of national development because of its ability to transform individuals to the benefit of themselves and the society at large. One of the major ways that education can be continued in

a lockdown period as a result of pandemic is through the e-learning platform that should be explored and used to enable education. Despite the overwhelming benefit of the online learning, it has faced series of challenge that has marginalized Nigerian students. This is owing to poverty, epileptic power supply, corruption, lack of adequate record keeping just mentioning a few. With regards to the challenges listed above, the government in collaboration with the communication companies should provide Nigerian student opportunity to access online learning during pandemic periods. Researches and more studies should be carried out in order to learn students' peculiar behavior and characteristics towards e-learning programme. Online trainings should be organized to orient teachers on how to access these online programmes and maintain their usage.

The e-learning should not be relinquished to the background as Nigerian has grown beyond the state of adopting traditional method of teaching alone. In the birth of a new baby, people gather together to rejoice that there is born to them a new born, that will grow to adulthood but, when such child refuses to grow according to their age and time, that child is refusing to make progress and lacking development. E-learning should be encouraged and well utilized as this includes one reason why a nation is termed as a developed nation.

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