Covid -19 and Higher Education in Nigeria: Issues, Challenges and Way Forward.

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--*ABSTRACT*--
The emergence of COVID-19 across the globe had become a major concern for countries all over the world. Over the years, there had been lots of global health challenges which had threatened the existence of human beings in the world but none had adversely affected education as corona virus did since its outbreak in 2019 in Wuhan, China. Nigeria detected its first case on February, 27th 2020 in Lagos. As of June 13th, 2020 the country tested 92,924 samples and had 15,682 confirmed cases and 407 covid-19 related deaths in 35 of the 36 States in Nigeria and Federal Capital Territory. In order to contain the spread of the virus, on March 30th, 2020, the Federal Government announced a lockdown in FCT, Lagos and Ogun states. Many Governors in other States followed the Federal government initiative. The Federal Ministry of Education also ordered the closure of educational institutions across the country. These measures were taken in order to contain the highly contagious respiratory disease, isolate the infected persons and trace the people who might have had contact with the infected persons. This study dwells on the challenges precipitated by the closure of the Higher institutions in Nigeria and the adoption of online teaching/learning by some institutions to forestall permanent closure of academic activities in their schools. We look at the challenges faced by the students, pains and pangs of the parents and recommend that the interconnectivity of the networks should be improved upon and cost of internet access reduced for the usage of Nigerian students.
KEYWORDS: corona-virus, higher institutions, pandemic, online education.

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I.   INTRODUCTION

According to the World Health Organization (WHO, 2020), coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. The WHO further asserted that people infected with the COVID-19 virus experience mild to moderate respiratory illness and recover without requiring special treatment. However, older people and those with underlying health conditions such as diabetes, cardiovascular disease, chronic respiratory disease, and cancer are more likely to develop severe sickness and deaths. Despite the number of public education on how to prevent and slow the transmission of the disease, the disease has spread globally to 210 countries and territories around the world with a total 2,013,918 confirmed cases of the COVID-19 that originated from Wuhan, China, and a death toll of 127,587 death (Worldmeter, 2020).

The disease was discovered through whole-genome sequencing, polymerase chain reaction and bronchoalveolar fluid from infected persons (Zhou et al., 2020; Zhu et al., 2020). The mode of spread from humans to humans created the need for social distancing and avoidance of crowded places. Considering this, most governments have shut down schools and institutions where crowds cannot be avoided until further notice. The unexpected closureof educational institutions promoted the authorities to suggest emergency remote teaching to ensure that students are not left idle in this pandemic era. Therefore, the conventional methods (traditional face to face teaching) have been replaced by online (e-learning) for the time being. Comparing the developed world to the developing countries, it was found that developing countries are facing challenges such as poor internet connectivity, inadequate knowledge on the use of ICT and weakness of content development (Aung&Khaing, 2015). For instance, delivering content like video and other applications still new to many educators even at the tertiary level in developing countries. This new trend demands better technology and educators changing their workplace culture. An importantfactor to consider before implementing e-learning is

whether the learners are ready and will be successful in an online environment (Guglielmino&Guglielmino, 2003; Wartkins et al., 2004). Although learners may demonstrate success in conventional education and classroom, that alone is not enough to guarantee success in an online learning situation (walkins et al., 2004).

II. CONCEPTUAL CLARIFICATIONS

- **Corona-viruse**

Corona viruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and severe Acute Respiratory Syndrome (SARS-1. A new strain of coronavirus (SARS-CoV-2) causes Coronavirus disease 2019, or COVID-19, which was declared as a pandemic by the WHO on 11 March 2020.

Some coronaviruses are zoonotic, meaning they transmitted between animals and people. Detai;ed investigations found that SARS-CoV-1 was transmitted from civet cats to humans and MERS-CoV from dromedary camels to humans. Several known coronaviruses are circulating in animals that have not yet infected humans. Common signs of infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. In more severe cases, an infection can cause pneumonia, acute respiratory distress syndrome, kidney failure, and even death. Standard recommendations to prevent the spread of infection include regular hand washing, wearing a face mask, going outdoors when meeting people, and avoiding close contact with people who have tested positive regardless of whether they have symptoms or not. It is recommended that people stay two meters of six feet away from others, commonly called social distancing.

- **Higher Education**

Any of various types of education give in post-secondary institutions of learning and usually affording, at theend of a course of study, a named degree, diploma, or certificate of higher studies. Higher-educational institutions include not only universities, polytechnics and colleges but such fields as law, theology, medicine, business, music, and art. Higher education also includes teacher- training schools, junior colleges, and institution of technology. The basic entrance requirement for most higher educational institution is the completion of secondary education, and the usual entrance age is about 18 years. (see also college university).

- **Online Education**

Online education is a form of education which is delivered and administered using the internet. It is flexible instructional delivery system that encompasses any kind of learning. It is electrically supported learning that relies on the internet for teacher/ student intervention and the distribution of class materials. It also involves courses offered by post secondary institutions that are 100% virtual excluding massively open online education or virtual classes offered over the internet, is contrasted with traditional courses taken in the face –to- face classes.

- **Pandemic**

A pandemic is an epidemic occurring on a scale that crosses international boundaries, usually affecting people on a worldwide scale. A disease or condition is not a pandemic merely because it is widespread or kills many people; it must also be infectious. For instance, cancer is responsible for many deaths but is not considered a pandemic because the disease is not contagious (i.e easily transmittable) and not even simply infectious.

A pandemic is an epidemic of an infectious disease that has spread across a large region, for instance multiple continents or worldwide, affecting a substantial number of people. A widespread endemic diseases with stable number of infected people such as recurrences of seasonal influenza are generally excluded as they occur simultaneously in large regions of the globe rather than being spread worldwide.

III. THEORETICAL FRAMEWORK

The doctrine of necessity is a term used to describe the basis on which extra-constitutional actions by administrative authority, which are designed to restore order or attain power on the pretext of stability, are found to be constitutional even if such an action would normally be deemed to be contravention to established norms or conventions. It also includes the ability of a private person to violate a law without punishment where the violation of law was necessary to prevent evenworse harm. The maxim on which the doctrine is based originated in the writings of the medieval, jurist Henry de Bracton, and similar justifications for this kind of extra-legal action have been advanced by more recent legal authorities, including William Blacstone.

In modern times, the doctrine was first used in a controversial 1954 judgment in which Pakistani Chief Justice Muhammad Munir validated the extra-constitutional use of emergency powers by Governor General, Ghulam Mohammed. In his judgement, the Chief Justice citedBracton's maxim, 'that which is otherwise not lawful is made lawful by necessity', thereby providing the lable that would come to be attached to the judgment and the doctrine that it was establishing.

The doctrine of necessity has since been applied in a number of commonwealth countries, and in 2010 was invoked to justify extra-legal actions in Nigeria.

The adoption of an online education became inevitable by the higher institutions all over the globe to forestall the permanent closure of educational activities as a result of Covid-19 pandemic. Although, many institutions in poor nations were unable to tap into this because of many reasons that will be discussed later.

IV.   COVID-19 & HIGHER INSTITUTIONS

School attendance is one of the best public tools available to raise a child's skills, awareness and ability. However, this long period of school closure because of the outbreak of Covid-19 have significant consequences on skill acquisition and growth of school children. It is worthy to note that schooling provides adequate learning but when schools close, children are deprived the opportunities for academic growth as well as academic development. The disadvantages of school closure are enormous for under-privileged students who tend to have fewer or no educational opportunity outside school. The closure of schools, colleges and universities does not only interrupt the teaching of students around the world, it also coincides with a key assessment period and many examinations were postponed or cancelled as a result of COVID-19. For instance, Cambridge International Examinations that include Cambridge IGCSE, Cambridge, O Level, Cambridge International AS and A Levels, Cambridge AICE Diploma and Pre-U examinations for May/June 2020 diet were canceled worldwide. Though candidates could be awarded grades based on the forecast grades sent by their teachers, but, to some extent, this would not represent the true performance of the candidates as some teachers may be biased and either over-grade or under-grade their students while predicting scores for them. Other International Baccalaureate, Scholastic Aptitude Test (SAT) and American College Test (ACT). Apart from these, students who sat for Senior Secondary Certificate in Examination (WAEC) in the west African countries had their examinations postponed. The implications of this on candidates is that, thousands of students will be forced to defer the start of their studies for their undergraduate studies to a later year since 2020/2021 admission processes would have ended before their results would be released.

V.   IMPACTSON HIGHER INSTITUTIONS

There is no doubt that students in terminal classes in lower and higher levels of education system of Nigeria were held on a spot; they were unable to graduate or even move to the next level in their academic pursuit which has led to a great back of the smooth running of educational sector of Nigeria and the world at large. What makes education beautiful and fulfilling is the progress in terms of moving to the next level, graduating and becoming a useful and acceptable member of the society after being exposed to the teaching – learning processes in the school and thereafter contributes meaningfully to the advancement of the country. The careers of university graduates were severely affected by the COVID-19 pandemic. They have experienced major teaching interruptions in the final part of their studies, interruption in their assessments, and finally they are likely to graduate at the beginning of a major global recession, because there is no doubt there will be global recession in the economy of the world at large at the end of the pandemic lockdown. While there was boom in the economy of Nigeria in the past, some graduates still find it difficult to get their desired jobs in the labor market, now that there is every tendency that the economy of the country could experience a drastic meltdown after the covid-19 pandemic, how will graduate get menial jobs let alone their desired jobs. Unfortunately if this persists for a longer period of time, there might be a great hit on the smooth running of the economy, educational and other sectors of the country at large. Evidence suggests that poor market conditions at labour market entry cause workers to accept lower paid jobs for survival first, and that this has permanent effects on the careers of some graduate because they have been doing the jobs far related to their area of specializations for so many years which on the long run has made them not been fulfilled in their choice careers. Oreopoulos et al. (2012) show that graduates from programmes with high predicted earnings can compensate for their poor starting point through both within- and across-firm earnings gains, but graduates from other programmes have been found to experience permanent earnings losses from graduating in a recession.

VI.   CHALLENGES OF ONLINE EDUCATION

The shift is already happening. With the flexibility and freedom to learn at a pace that suits the individuals, the e-learning industry is attracting more and more students. At a place where online education has flourished the concept of personalized learning and instant access to the content, learners are still encountering some challenges in completing their online courses successfully. Reports say that more than 6.3 million students in the U.S. have enrolled themselves in online courses and the number is increasing day by day.

Students need to be technically proficient in order to handle their online courses but more importantly, there are certain challenges that need to be conquered so that online learning can effectively serve its purpose. Some of these challenges are discussed herein.

▪ **Difficulty in adapting to the virtual environment**

Students have a habit of learning in a traditional classroom environment and are accustomed to face-to-face learning. Hence, it might not be very easy for them to settle for the computer-based learning environments. The traditional classrooms are more about passive learning and taking notes while e-learning requires students to interact actively and participate in the online class. That might involve clicking some options, answering a question, taking homework help or giving a feedback.

Students need time to get used to the study environment, the online content management system and the e-learning methods. The students must be made aware of why they need to shift themselves and why e-learning is favorable for them. More discussions regarding the importance of online learning should be held so that the students can easily accept this change.

▪ **Low computer literacy among the students**

Basic computer literacy is a must for online learning. You should be able to handle all your files, study resources, and assignments digitally. Students who don't know how to use the basic computer programs might face difficulties in managing their online study material. Online learning requires continuous interaction with digital devices such as computers, smartphones or tablets and other peripheral devices such as a modem, adaptors, printers, scanners, microphones, or routers. Hence, students should be aware of how to use them.

▪ **Dependency on the Internet and Technology**

The students should know how to use the internet and how to connect to a network. E-Learning courses most of the times come with technical requirements such as the browser compatibility, system requirements, strong internet connection and high bandwidth. A student who does not have access to such requirements cannot access online learning effectively. Hence, there is a need to have a computer, internet connection and a little technical knowledge so that the students can troubleshoot the problems that occur.

▪ **An absence of support and offline learning**

An absence of technical support from the e-Learning provider's side can cause a lot of trouble to the students. It may lead to delay their progress in the course. Hence, a continuous tech support must be ensured to the students so that they can get solutions immediately. It might not be possible every time for the students to go online and access the study materials. The providers should offer downloadable study material and assignment help so that the students can study offline also.

▪ **Extensive coordination is required in e-learning**

Sometimes, topics demand face-to-face discussions and interactions. It might not always be possible that the pre-recorded instructions of an online course are clear enough for every student such as in case of essay assignment help. Students who face difficulties in such a scenario may have to send the queries additionally to the instructors and then have to wait for them to understand the query and answer appropriately. Students may find it hard to communicate with one another as well. If the students are required to work in groups, coordinating with everybody online might not appear as easy as working together in college classrooms.

▪ **Everything cannot be taught on the internet**

Not all degrees can be transformed into online courses. Subjects which require laboratory experiments and hands-on experience might not be taught efficiently to the students via an online course. However, there are possibilities for simulating a laboratory on the internet but it may not happen in every case. Another possibility is the introduction of the concept of hybrid learning. In hybrid learning, students get to experience the best of both the worlds as students spend some time in online learning and the remaining time in the traditional classroom learning.

▪ **The complex structure of the course**

The course structure plays a crucial role in the success of an online course. Unclear instructions, less interactive elements and complex navigation of the course may result in lost interest of the students. Students might find it difficult to get engaged in such a course that includes a continuous reading of the text from a document and a content that has no real-life applications to show. Hence, the content providers should focus on creating online courses that have well-defined structures and cover all the aspects of e-Learning such as interactive elements, assessments exercises, feedback facilities, live chat features and clear instructions (Okafor, 2018).

In the end, yes, there are certain challenges that students might have to deal with while learning online. But a change in attitude, expectations and a little technical knowledge can help them achieve an online degree or certification. In fact, everyone can succeed in online learning if they adopt better study habits and self-discipline.

▪ **Prospects of Online-Education in Higher Institution in Nigeria.**

Kelsey, M. (2019) stated that adjusting to an online learning education could be challenging at first but with constant practice may become beneficial for career advancement and for demonstrating key skills to potential employers. The following are top propects in online education;

- Online education is flexible to run.
- It is a self-paced learning.

- It improves visual communication and collaboration.
- It refines critical thinking and
- It develops self-motivation.

In Nigeria, online education has become increasingly popular. This can be perceived even from the introduction of computer based examinations in JAMB (Joint Admission and Matriculation Board) and the introduction of some educational 80th wares that has to do with the use of computers.

Shikha, A. (2019) states that the current trends show that online education will continue to be on a high demand as people want to work and also learn at the same time. Students who find it difficult to gain admission into conventional universities because of pandemics, wars and internally displaced persons would find online education attractive. Due to the general high demand, the programmes are improving by the day to compete or serve as substitute for the normal traditional classroom. This improvement can be experienced in the area of virtual classroom where practical classes can be taught online. It has also proven to be user friendly to students in terms of students preparations for competitive examination through the use of webinar, Mock test, videos and counseling.

VII.   CONCLUSION

Though engaging students in this pandemic era had been good to keep them active and busy with studies, there are a lot of challenges that should have been addressed before the pandemic era. For instance, the blended approach should have ushered students' to online learning before the change to complete online learning. To many of the students, online learning is something new and once they are in the pandemic era, they would have preferred the semester to be put on hold until further notice. Before adopting e-learning an organization should consider the business environment, technology, content, training procedure, culture, human resources, and financial considerations (Borotis&Poulymenakou, 2004). All these issues were not considered before the implementation of e-learning in tertiary institutions in Nigeria. Future studies should examine student's satisfaction in studying online from the conventional approach after the COVID-19.

VIII.   RECOMMENDATIONS AND WAY FORWARD

i.   The ministry of education in Nigeria should employ experts in the area of ICT to handle online education, in case of recurrence of another pandemic in the future.

ii.   It was observed that there were no proper plans in place to curb and manage the influence of corona-virus on the educational system, it is highly recommended that governments and concerned educational personnel should ensure there are futuristic plans in case of another similar experience.

iii.   The interconnectivity of the network services should be improved upon to ease the problem faced by students and teachers in the operation of online-education.

iv.   Since one cannot operate online education without using data, couple with the number of the people using it, it is recommended that the cost of data should be reduced to lighten the huge financial burden on the students and teachers of online-education.

v.   Government should see the need to build good schools and equip them with modern digital facilities that can aid online education by providing digital devices as well as internet connections.

vi.   Government should ensure inclusion of online teaching such as integrated digital learning platforms, videos lessons, broadcasting through radio and TV etc. to supplement the normal classroom teaching even when there is no pandemics or disaster.

vii.   Parents should pay personal attention to monitor and supervise their children until they adapt to the online teaching environment.

viii.   Government aid is needed in terms of investing in educational tools of the future alongside a total revamp of the educational sector as reforms in the national curriculum post-pandemic would be an effective way to bridge the gap in inequality.

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