

COVID-19 PANDEMIC: THE PENDULUM FOR RECONSTRUCTION OF INSTRUCTIONAL SYSTEM IN NIGERIA

CHAPTER SIX

Digital Library Resources for Disrupted Education: COVID-19 Pandemic Crisis

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Abstract

Education is the bedrock of every society and an investment for effective national development of any country. Education institutions, which include schools and universities are established and focused essentially to achieve certain stated goals and objectives, which when reached, will meet for the mission and vision of the institution. There are certain integral pre-requisites to actualize the educational goal such as adequate provision of education resources and library/information resources. This research is about digital library resources for disrupted education during this COVID – 19 pandemic crises. The work captured the overview of the infection- COVID-19 as a global illness that started from Wuhan, China. The symptoms of the infection, how the virus can likely be spread on a close contact with the victim or on an infected object. It also explained on how to prevent the spread of the infection as: wash hands regularly, maintain social distancing and strategies on how to curb the high risk of spreading. This study shows how the virus got to Nigeria, which led to the closure of all social gathering and the alarming closure of schools, quarantine all students at home. The author discussed on the management of disrupted learning (school closure), which online/distance learning was seen as an alternative form of learning in this pandemic. The paper discussed the great role of digital learning resources for the e-learning and its importance in assisting the students. Software platforms for the e-learning was captured such as ZOOM, MOOC etc. However, the paper highlighted some challenges in administering e- learning as thus: poor connectivity of internet, lack of facilities, lack of data privacy and adjusting online courses to suit disability students among others. Among the recommendations: use interactive online lecture session, reliable network infrastructure and effective instructional method as a teaching strategy.

Keywords: COVID -19 pandemic, Learning, Information resources, Disrupted education.

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Introduction

Coronavirus disease (COVID–19) is described as a novel illness, which has turn global world in a though salvaging state that none has ever experienced before. It is a disorder caused by a virus that can spread from one individual to another, usually after close contact with an infected person, object or infected surfaces. Adhikari et al (2020) described Coronavirus as family of viruses that may cause various symptoms such as pneumonia, fever, breathing difficulty and lung infection, which is common in animals and likely humans. Ahmed (2020) emphasizes that this said virus are widely distributed in many different species of animals, including bats, cattle, cats and camels, which causes respiratory tract infection in human. This acute respiratory syndrome of unknown illness was reported to be for the first time in Wuhan city in China in December, 2019, this deadly virus continued to demonstrate a fast growing and spreading nature in various communities, cities and countries.

Ozdemir, (2020) opined that this coronavirus family has significant human and animal pathogens, it has quickly widespread, resulting to a pandemic, an increasing number of cases in various countries throughout the World. As days go by, the virus made an alarming advancement that warrant lots of scientists and researchers to deep inside researching in search for a remedy to it or a cure, which up till now has not been found a particular drug or vaccine for it. That undetected COVID-19 virus infections pose an immediate health *challenge* to the individual globally and till date, there is no specific treatment or vaccine available for COVID-19, including anti-retroviral zinc (Chandra-Kapata; Kapata and Zumla, 2020). As at early 2020, it has spread outside China, with confirmed infection index cases of 37364 in 113 countries. Gennaro et al (2020) declared that it was a significant community transmission occurring in several countries worldwide, then was tagged a global pandemic by the World Health Organization (WHO) because of the advances in the spread.

The Symptoms of COVID–19 Infection

The possible incubation period of the virus is between 2 – 4 days, this time is the period between when someone is infected and when it starts showing the symptoms. Eventually if the person remains normal, without any sign after 14 days, no possible contact with an infected confirmed person, it is likely that such person is not infected, but if symptoms shows, it means that the person has been infected with the virus. Jewel (2020) stressed that once the virus develops in people, since the viral material perpetually hangs out in

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these droplets and can as well be breathed into the respiratory tract, it can then lead to an infection and the person will automatically be infected with the virus. Such symptoms that can likely show on the infected persons are: coughing, shortness of breath, fever and muscle pain. In some cases, the infection can cause a severe symptom with weak immune system, older people and someone with long term disease conditions. Rothan and Byrareddy (2020) stated that cases that occurred with families and among people did not visit the wet animal, rather person – to – person transmission occurs primarily through direct contact, through droplets spread by coughing or sneezing from an infected individual.

The Spread of COVID – 19

COVID – 19 spread is most likely to occur when there is close contact with an infected person. The risk of being infected, is when there is close contact with the victim of the disease. MacIntyre, (2020) noted that most significantly, the transmission of COVID-19 is that extensive transmission is possible with slight symptoms or no symptoms, that can last 5-9 days before people notice serious fever and tend to seek for medical attention, which is a risk period for transmission and possible spread of the viruses. Unfortunately, some countries with weak health systems and poor diagnostic capacity may be prone to large epidemics, while some countries will manage to contain the spread better than others. Health experts had their thought that warmer weather conditions could slow down or rather halt the coronavirus spread. The spread of viruses can be affected by many impending factors, such as climatic conditions like temperature and humidity, population density and medical care quality (Ahmadi; Sharifi and Ghanbari, 2020). People can become infected either through: Secretions being directly transferred into the mouth or noses of people who are close or could be inhaled into the lungs; Touching a surface or object that has been contaminated by the infected, since it can stay active between 2- 4 days and in contact with the infected droplets.

Preventing the Spread of COVID – 19

The main and best ways of protection from this pandemic disease is totally avoidance of being exposed to the virus, through the observation of certain rules such as:

1. Maintain at least 2 meters distance between yourself and anybody irrespective of who is coughing, sneezing or not.
2. Cover your mouth and nose with your bent elbow or tissue, when you cough or sneeze and dispose the used tissue immediately.

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3. Wash hands regularly with soap under running water or use an alcohol-based sanitizer.
4. If you have fever, cough or difficulty in breathing, seek medical attention.
5. Always keep up to date on the latest information from trusted sources e.g. World Health Organization (WHO) - local and national health.

Chakraborty and Maity (2020) opined that to decrease the damage connected with COVID – 19, some public and infection control actions are highly necessary to limit the global spread of the virus. The prevention of the said disease is of utmost importance, because of the increase on the number of cases. That is why some strategies has been discovered to be on the watch out in order to curb the high risk of the spread. Such strategies are thus:

1. Mandatory quarantine
2. Cross border travel restrictions are imposed in order to reduce the risk of case importation.
3. Public health measures
4. Travel restrictions on high-risk areas (City Lockdown)
5. Family outdoor restrictions
6. Mandatory Stay-at-home measures
7. Tracing and quarantining close contacts of suspicious cases
8. Management of communities by thus: checking body temperature of entrant; allowing only community residents to enter and exit, keeping only one entrance in the community for proper check and control etc.

Nigeria became a victim like other countries with some infected cases in most cities like Lagos and FCT, Abuja This has kept the country in an unsteady state till date. The first COVID – 19 case in Nigeria was confirmed on 27th February, 2020 in Lagos. As time went on, it increases and penetrated other states in Nigeria in its salvaging uncontrollable nature. Kalu (2020) inferred that the first official case of COVID-19 in Nigeria was noticed and announced, it was an Italian citizen, who recently arrived Lagos from Europe, including another patient in Ogun State that have been in contact with the first patient. Since then in Nigeria, the situation developed into more occurring cases regardless of so many measures indicated by both Government and individuals to combat the virus and return to normalcy. Trying to manage the situation, there were restrictions to social gathering, religious worship, businesses, market buying and selling, schools attendances, universities opening in order to curb the spread of the said virus. Maintaining social

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distancing, isolation of suspected individual and quarantine practices were also used as suggestive measures to none spread of the virus. As at May 2020 globally, the confirmed cases were 4139794, confirmed deaths were 285328 in about 215 countries.

Management of Disrupted Learning Amidst COVID–19 Pandemic

The issue is how can students, especially university learners stay idle at home for such a long time as it seems to be, without any form of learning. Online learning (distance learning) is the answer to this situation, which is the kind of instruction that is highly needed and can be used to still push education and learning forward till date. Huang; Liu; Tlili; Yang; Wang et al. (2020) opined that COVID-19 continues spreading in many countries of the world and how to keep learning in a free disruption state has become a major challenge to the global education community. In a bid to slow the spread of COVID -19, there was discontinuity in education caused by global issues that affect almost every continents of the World and as a result of that there was a total lockdown nationwide. (Oyeniran, et al 2020). Through initiative, there provides the practice of flexible online learning to still keep the students going, however very rare institutions practice it in Nigeria. Most institutions are adopting different online learning strategies with different software for blended learning, such as massive open online courses (MOOC), video-based one-on-one tutoring as an alternative form of learning in this pandemic. Zayapragassarazan (2020) inferred that it is time to think of a learner-centered approach that offers rich learning choices to the student, whereby they are provided with a variety of choices for their learning and allows them to take more responsibility for their own learning. More so, group-based students discussions with the use of ZOOM platform, so that all participants may connect and interact with each other more conveniently. Viner, et al (2020) alternatively supported some countries that instituted class suspensions rather than school closures, facilitated by keeping students in a homeroom class with a core teacher and having other teachers routinely moving round the classes, which is an effective social distancing measure in this pandemic while reducing school disruption.

Online/distance learning is the form of learning where the instructor is physically separated from the student, but often communicates through communication technologies for information and knowledge acquisition. It could either be synchronous or asynchronous method of learning delivery, provided there is a justifiable learning outcome for the benefit of the learner, irrespective of their location. Usman (2016) opined that

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sharing knowledge could be synchronous or asynchronous online discussion, that are designed to facilitate communication and knowledge-sharing among learners then learners can comment and exchange ideas about course activities or contribute to group learning by sharing their knowledge in this COVID-19 pandemic outbreak. It involves pre-packaged text, audio, and video courses, which is advantageous and with limited interaction with an instructor. Online learning, which involves pre-packaged text, audio/video conferencing, zoom platform services, computer-based technology, cyber learning, digital learning/textbooks to support the e-learning and encourage the students to explore for their own interest for being an active learner during the school disruption emerged as a result of COVID-19 pandemic lockdown (Ofodu, 2015).

COVID–19 pandemic has led to certain exceptional circumstances on education programmes for learners. It is of great value to support skills in school activities, because it is not possible to take part in the originally intended learning programmes in this pandemic season. It is imperative to adopt more flexible and effective e- learning that suits this time, as such more specialized skills are needed for the unique interaction with the e-instructions and e- resources that can be mostly employed in this season. Reimers, Schleicher, Saavedra and Tuominen (2020) noted that it is quite understandable that though students with access to ICT and digital devices, including internet may not be the majority in most countries in order to support government for the available effective online education. It is of utmost important for students to engage and be exposed to certain skill acquisition for the e-learning to improve upon a plan for education continuity. Technology (ICT) and its useful facilities ought to be put in place in order to enhance the activities of the e-learning and the access of the needed electronic resources for the learning programm. Food and Agriculture Organization [FAO] (2011) identified models for designing e-learning courses as thus:

1. Analysis: Topic analysis is carried out to identify and classify the course content of e-learning
2. Design: Formulate a set of learning objectives, order of achieving and selection of learning instruction.
3. Development: This comprises the content development, storyboard development and courseware development into an interactive component, producing the course in different formats for CD-ROM and web delivery into a learning platform that learners can access.

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4. Implementation: The courseware is installed on a server and made accessible for learners.
5. Evaluation: At this point, there is need to evaluate the learner's reaction and the achievement of learning objectives.

The e – learning in this pandemic is very vital, so as to keep the students busy even now they are isolated at their various homes and is of great need that students should benefit all round by using the necessary resources for their academic work, since no gathering and stay-at-home syndrome has been the order of the day.

Provision of Digital Library Resources to Support E- Learning in COVID-19 Pandemic

It is always known that library is the center of any academic institution that provide learning resources for students' academic work. Professional librarians have always been in charge of making ready for properly organized resources and make it available for use for their patrons. In this pandemic, that normal school attendance is not possible, rather online learning has become the order of the day. It is of paramount importance that librarians digress possible means of making resources/ information available for patrons for learning. UNESCO (2020) stated that it is vital to develop a platform that is responsible for coordinating education challenges in COVID-19 pandemic in providing information resources for continuing education and individualized learning of children at their various homes. Virtual resources (library without wall) becomes an alternative, such virtual learning resources with appropriate links thus: E-books – www.digitalbookindex.com; www.bookbunker.biz; E- Journals e.g., JSTOR – <http://www.jstor.org>; E – Reference books – <http://www.britannica.com/> <http://dictionary.cambridge.org>; E – Zine (electronic Magazine) – www.indiatoday.com/ www.musicindia.com; E – Thesis and Dissertation – www.unesco.orb/ <http://scholar.lib.vt.edu/thesis>. Students from their various homes make use of these links to the resources of the library for their studies. Subscribing and updating of relevant databases that will aid the access and retrieval of needed information by the users, such databases like EBSCOHOST – <http://search.ebscohost.com>; HINARI – <http://www.who.int/hinari/training/en>; AGORA – <http://agorajournals.fao.org>. The shift to virtual learning as a result of pandemic presents challenges to institutions in some developing countries, many university libraries not having sufficient IT facilities and financial means to put remote access in place in order to bridge the digital divide and grant students access to subscribed e-resources from homes (Krueger, 2020).

Sandars et al (2020) identified tips for migrating successfully to online learning as thus:

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1. Moving through the change management stages.
2. Use the current learning management system.
3. Using online learning modalities by optimizing the potential of online lectures.
4. Optimize online small groups using intentional design.
5. Improve the potential of asynchronous online tutorial.
6. Enhance the possibility of online videos.
7. Augment the potential of social media.
8. Optimize the potential of online reflection
9. Start first with part-task online training.
10. Simplify the massive online world for learners.
11. Encourage and sustain co-creation of online resources and activities.
12. Demonstrate the value for active shift to online learning.

With the above, it is important to observe some certain factors for enhancing online learning during the compulsory stay-at-home (COVID-19 pandemic), as thus:

1. Use of needed technologies and its facilities for learning.
2. Ensuring reliable network.
3. Adopting relevant digital learning resources.
4. Organizing and facilitating learning/ learning activities towards a justifiable outcome.
5. Enforcing proper collaboration between government and schools in terms of funding a whole lot of the e- learning.
6. Provision of subscribed and updated databases and its links in some core subject areas for the students' read at home, such as JSTOR – <http://www.jstor.org> – multidisciplinary; LAWPAVILIONPLUS – <http://www.lowpavilionplus.com> for Law etc.

Problems of Disrupted Learning During the COVID -19 Pandemic

Immediately the closure of school, when the coronavirus has forced schools globally to switch to online learning, some developing countries like Nigeria are into problems of continuing education and studies. Majority of children without access to remote learning were left behind. There is need for ICT facilities, internet and other enhancing structures that can aid accessibility of online, e-resources to help them cope with the online learning. The children need to be ICT complaints, but unfortunately most of them are not IT skilled

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to access those information and online learning in cloud platform like zoom. Lisa (2020) listed some challenges for e-learning as thus:

1. **Organization of work Processes and Time Management:** Teachers have to move classes online immediately, using numerous digital tools to deliver the e-learning, handling so many information to suit their virtual teaching.
2. **Lack of facilities e.g. Laptops, Internet for the e-learning:** There is limited ICT facilities e.g. laptops, computers that can assist both the teachers and students for their e-learning.
3. **Poor Connectivity of Internet to Access online Lectures and Resources:** During this pandemic, millions of people around the world are online, experiencing a lot of technical difficulties, either in form of bad internet connection or high usage rate of online learning system.
4. **Lack of ICT and Computer Complaint:** It is not easy for teacher and the student to start using digital tools overnight, without additional training for them to participate in the e- learning.
5. **Adjusting of Online Courses to Deaf or Hard of Hearing Students:** It is highly challenging for deaf and hard of hearing students to be able to adjust quickly to online learning.
6. **Lack of Data Privacy:** Since the closure of schools, teachers are trying to use several platforms for e-learning. Such platform like ZOOM for remote conference services, which stores video conference recordings on storage space without a password are easy to be tampered with, due to lack of data privacy.
7. **Increase in Cybercrimes (No security):** COVID-19 outbreak paved way for cyber-criminal acts. The possibility of keeping some sensitive data from being stolen is number one priority for the digital tools that assist in delivering e-learning.
8. **Isolation (No Communication between the Teacher and the Students):** Students got used to staying in the classroom and having eye-to-eye communication, while in the classroom since such has been the order of learning. Isolating from teachers and each other for this e- learning will highly be a challenging factor to cope with.
9. **Lack of Interactions:** In online lecture, it is impossible to keep students engaged without the teacher's physical presence. Now that the pandemic separated the physical contact of teacher from the students, they may likely not do wonderfully well in the e- learning studies.

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10. **Lack of Learning Management System (LMS):** COVID -19 and the closure of school, learning management system will not be justifiable and guaranteed.

Conclusion

The COVID-19 pandemic has resulted in a complete sudden reliance on the use of online learning, which paved way for enhanced teaching and learning that requires careful attention to ensure optimization on the currently available learning platforms and digital/information resources for students at home. To ensure enhancement, it requires working with existing curricular packaged and presented in an online lecturing and services. Adopting relevant technologies and skills is an advantage to ensure learners full participation in the online learning and use of e- resources. This shift to e-learning seems to make learning better when get- used –to and harnessed properly, which will make most efficient approaches to digital learning and do it better.

Suggestions

The following suggestions are made after the study:

1. The government should make effort in provision of digital resources that can assist in combination of technology and media in learning.
2. Network providers should ensure reliable network infrastructure that can handle many users simultaneously without any chaos.
3. School authority should provide several learning materials to the needs of learning for people with disabilities, to cater for their individual learning needs.
4. Schools in collaboration with the government should organize training for teachers and students on the proper use and handling of e-learning facilities.
5. Schools and teachers should conduct a proper supervision on the progress of the e-learning lectures and supply of e- resources.

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