Adult Learning through E-Learning Platforms in The Face of Covid-19 Pandemic: An Overview of China and Selected African Countries

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Abstract: **This paper discussed on the issue of adult learning through E-learning platforms in the face of the corona virus disease (COVID – 19) pandemic. The paper focused on four countries that explored various E-learning platforms as a result of the emergence of COVID-19 pandemic; namely- China, Nigeria, Malawi and South Africa. From the study was discovered that E-learning is globally accepted as a positive force contributing to adult learning using different applications and processes which include web-based learning, computer based learning, virtual education opportunities and digital collaboration. The adverse effect of this global plague has prompted countries that are conscious of their education sector to be innovative. Based on the study, the following facts were noted- as a result of the emergence of COVID-19 pandemic, there is a high rate of anxiety, depression globally. Also, harmful drugs and alcohol abuses are now rampant. This work recommends that the Chinese government should implement multi-faceted approach that is, forming multi-disciplinary mental health team, providing psychiatric treatments and other mental health services, utilizing online counseling platforms, rehabilitation programs and ensuring certain care for vulnerable people. The Nigeria Federal Ministry of Education should devise more effective e-learning strategies, education interactive platforms for adult learners and to create an enabling e-learning environment for effective instructions. Malawi as one of the developing nations in the world should improve in the current online learning measures that are already in place as to get to the use of rural populace in Malawi. The government of South-Africa should design and make more available alternative contextualized cost-effective learning delivery channels that could outline COVID-19 pandemic.**

Key words: **Adult learning, E-learning, COVID-19, pandemic.**

I. INTRODUCTION

E-learning is a process of extending learning to locations away from classroom to another learning centres by using different types of technology such as video, computer, audio, and other multimedia communications (Mason, 2002). E-learning is refers to online learning or online education, it is a process that allows technology to facilitate learning anytime and anywhere. It serves as a specific medium to implement the adult learning process, the teaching and learning can be based in or out of the classroom with the use of computer and the internet. According to Laurivard (2004), E-learning can also be regarded as a network that enables transfer of skills and knowledge and the delivery of education is made to a large number of adult at the same or different times. The COVID-19 pandemic is considered as the crucial global health calamity of the country and the greatest challenge that the humankind has ever faced (Yoo, 2020) thereby, constituting a cog in the wheel of education, economic and social progress of the globe. For instance in Nigeria, education, social and economic system have been lockdown due to the menace of this global pandemic. Consequently in order to redeem the educational system for this horrific and deadly plague, it is necessary for a system of inculcating knowledge to adult learners be device. One of the most appropriate means of teaching and learning that is suitable is e-learning, because it allows both facilitator and the learner to maintain the required social or physical distance that is been stipulated by World Health Organization (WHO) as one of the ways of reducing the spread of this deadly infection.

II. WHAT IS E-LEARNING?

E-learning is learning conducted through electric media, typically on the internet. McDowell (2002) asserts that, e-learning applications and processes include web-based learning; computer- based learning, virtual education opportunities and digital collaboration. Successful e-learning depends on the self –motivation of the adult learner to study effectively. E-learning is learning using electronic technology to access educational curriculum outside of traditional classroom learning. Donna (2009) says that in most cases, e-learning refers to course programme or degree delivered completely online. It is interactive in that you can also communicate with your facilitator or other adult learner in your class. Sometimes it is delivered live, where the learner can electronically raise his/her hand and interact in real time and sometimes it is a lecture that has been pre-recorded. There is always a facilitator interacting or communicating with the learner and grading his/her participation. E-learning has been seen as a successful technique of training and educating adult learners (Donna, 2019). It is becoming a way of life for many citizens in the world. E-learning can be self-paced or instructor-led, it involves media in the form of text, image, animation and streaming. Gray (2011), states that e-learning has now become a part and parcel of the 21st century world, everyone is getting online, everything is seen online, and those who are not getting online are missing out on the immense power of this modern age wonder.

Adult E-learning

Adult E-learning in any of the adult educational programmes is fast becoming an accepted and indispensable part of the mainstream of education learning system process in both developed and developing countries (Dokubo, 2013). It is an innovative method of learning process, realizing that the need for "all" to learn is a fundamental human right. This process of learning permits more learner-instructor, learner-learner communication and a high degree of individualization of learning and learner construction of knowledge. (Moore and Tait in Dokubo 2013). E-learning manages to solve the numerous challenges adult learners face during studies, it allows them to progress at their own pace, to submit assignments and take assignment at their own pace, the learning process is flexible for adult learners, because they are forced to balance employment, family duties and online learning altogether. With e-learning adult learners have the chance to become more international than ever before, because they read vastly and explore internet.

What Is COVID-19 Pandemic?

In December 2019, a new infectious respiratory disease emerged in Wuhan, Hubei province in a country called china and was named by the World Health Organization (WHO) as COVID-19 or coronavirus disease (Corbalenya et al, 2020). According to them, a new class of corona-virus known as SARS- COV-2 (severe acute respiratory syndrome coronavirus 2) has been found to be responsible for occurrence of this disease. As long as humans exist, and innovations and civilization are taking place, there will always be severe outbreaks of diseases caused by a number of viruses. According to the report of the WHO dated Thursday July 23, 2020 by 10:00 CEST the current outbreak of COVID-19 has affected 14,765,256 people and killed 612,054 people in more than 200 countries throughout the world (http://covid19.who.int). Up to this time, the world has not recorded report of any clinically approved antiviral drugs or vaccines that are effective and efficient against COVID-19. It has pose a lots of challenges in economic education, social and health sectors to the detriment of the human population. The COVID-19 outbreak is detrimentally disrupting the global economy, virtually all the nations are striving to slow down the transmission of this deadly pandemic by testing and treating infected patients, quarantining suspended persons, restricting large gatherings, maintain social and physical contact, keeping to complete or partial lockdown, washing of hands regularly and putting on face mask.

III. EXPLORING E-LEARNING PLATFORMS IN THE FIELD OF ADULT LEARNING BY VARIOUS COUNTRIES IN THE COVID-19 ERA

With the aid of the internet being able to make the impossible possible, at this present period of COVID-19 pandemic, learning has shifted to various online platforms. Countries all over the world are presently beginning to enter the sector of e-learning allowing adult learners to have a broader access to learning opportunities that were not possible in the past as such. Why this process of learning has become so popular now is because of the advent of COVID-19 pandemic, since adults learners no longer go to their classes for learning at their various learning centres. This paper discussed four countries that have explored e-learning platforms as a result of the COVID-19 pandemic; viz- China, Nigeria, Malawi and South Africa.

China

China is a country that has booming e-learning sector, but, as a result of this deadly disease, the country has over 70 online institutions and colleges (Yoo 2020). This has made learning significantly more accessible to adult learners who are undergoing courses in different adult learning centres in China, and at the same time holding on to their jobs so that they can work and earn their living. The e-learning in China has significantly contributed to broadening access and opportunities especially to higher education and to socio-economic development more generally, the media include synchronous and asynchronous systems of learning which are audio-teleconferencing or audio conferencing communication, full-motion video tele-conferencing, interactive instructional television (ITV) and so on. E-learning allows the facilitator to host live classes on any topic, schedule his/her class with live video and audio and have a global adult learner audience. Also the process allows adult learners to learn easily by downloading the study material they want, rather than paying heavy bills to facilitators.

Talking about the mental health condition of the Chinese in presence of COVID-19 pandemic, an online survey was conducted on a sample of 1074 Chinese populace, majority of whom from Hubei region, anxiety, depression, mental well-being and alcohol consumption behaviour were assessed through self-reported measures (Liu et al 2020). The result showed higher rate of anxiety, depression, hazardous and harmful alcohol use and lower mental wellbeing than usual ratio, the result also revealed that young 21-40 years are in more vulnerable position in terms of their mental health conditions and alcohol use (Liu et al 2020). To address these mental health crisis, it was recommended that multifaceted approach, that is forming multidisciplinary mental health team should be implemented, using online counseling platforms since the opportunity of meeting face to face is not encouraged, also knowing the fact that, online counselling platforms are the only efficient and effective means of counselling in this face of COVID-19 pandemic. With China leaving no stone unturned to combat COVID-19 pandemic, the country's vast and dynamic education system has gone online. China's nationwide coronavirus quarantine measurements saw millions of adult learners, pupils and students being confined to their respective homes for over a month as learning centres and schools embrace- e-learning to cater to their needs (Suvam 2020). While praising the tremendous e-learning exercise being carried in China, Kamal Duper in Suvam (2020) stated that: *"It's been really*

commendable. "I must say that China has quite effectively showcased the real use of technology and infrastructure to cope with the adverse situation. I must applaud the way they have used SMAC (an acronym for social mobile, analytics and cloud) integration to bolster e-learning".

Suvam (2020) declares that, China also boast of the world's largest online population, with around 840 million using the internet. It is seen in China that e-learning is a resource that can be used as an important mode of learning using online platforms. The COVID-19 pandemic has forced the Chinese to be more innovative and resilient facilitators and learners; they are now more disciplined and self -managed individuals. An emergency policy initiative called "suspending classes without stopping learning" was launched by the ministry of education to switch teaching activities into large-scale online teaching while schools were closed (Zhang et al 2020).

Nigeria

E-learning is a new phenomenon in promoting adult learning in Nigeria. Since e-learning is characterize by physical separation between the facilitator and learner, it is the most appropriate means of learning in this era of COVID-19 pandemic that is being considered as an indicator of inequity and deficiency of educational advancement. The statistics released by the Nigeria Centre for Disease Control (NCDC) on Thursday 23rd July 2020, shows that there are 38,344 confirmed cases of COVID-19 (http://covid19.ncdc.gov.ng), that is why the NCDC under the guidance of the federal ministry of health and other agencies, remains strongly committed to protect the health of Nigerians and it urges the public to remain aware of the risks of COVID-19 and to adhere to the preventive measures advised by the Presidential Task Force on COVID-19 and the Federal Ministry of Health. With all these measures in place, some of the adult learning centres and institutions in Nigeria have resorted to go on e-learning as a means of training, educating and transferring knowledge and skills to the learners.

For example Rivers State University swiftly switch to e-learning for their post graduate students, lecturers respectively setup bi-weekly classes using various meeting applications like zoom and goggle meeting. Learners are required to join the classes for proper instructions on their class activities, it is an interactive section since the sections allow rooms for debating, questionings and answering for areas that need further clarification, instructors also share learning digital aids in these classes. Online messaging applications are also used in addition to the meeting application, they also share links to further learning materials related to course and pre-recorded media files. The federal Ministry also use print, cassettes, audio and radio delivery methods to conduct classes for adult learners, the learners make use of e-mail, mailing lists and news group to consult with their instructors, add comments to an ongoing discussion, provide news, share information, start a new thread of conversation and so on, and the required writing assignments or examinations can be graded through e-

mail. But there are constraints in using these available measures and resources in teaching and learning, such as poor internet access, irregular electricity power supply, lack of effective library system, and so on. All these media processes of learning though not enough ameliorate the traditional or conventional system of learning. E-learning does not need physical contact and it produces learning materials of a high standards. Nigerians are conscious of education, that is why all these series of media are been used for learning in the face of COVID-19 pandemic.

Malawi

With the spread of the COVID-19 pandemic, Malawi is implementing emergency plans to slow down and limit the spread of the virus as well as preparing for a possible long-term disruption of educational activities. The interruption to the regular flow of educational activities possess a massive loss in Malawi just like every other countries in the development of human capital with significant long-term economic and social implications (OECD 2020). As of July 12 2020, the total coronavirus in Malawi was 2,261 cases, 517 recovered and 33 deaths (Worldometers 2020). As a global pandemic Malawi government has taken necessary measures to prevent and control the spread of this virus in order to reduce the mortality rate and other impacts the virus is causing in all sectors of development in the borders of an economy. Firstly, by appointing special cabinet committed on corona-virus which commenced in operative on 7th March 2020 with the goal of implementing a policy guidance and looking at other matters concerning the general risks of transmission of COVID-19 disease (George and Chidimba 2020). The committee recommended some precautionary measures such as avoiding close contact with people suffering from acute respiratory illness, regular hand washing with soap and water, or hand sanitizer, maintaining cough etiquette, the closure of schools and markets, indefinite closure of all institutionalized and formal education activities, postponement of public examinations for higher institutions respectively and Malawi secondary certificate. Secondly, considering the nature of this pandemic emergency which requires minimizing physical contact and to ensure dis-interruption of educational activities in Malawi, the Malawians resorted to use different delivery media which include use of radio for broadcasting of instructions for adult learners, both radio and online courses are being considered (WHO 2020). Malawi's capacity for e-learning became adequate due to availability of infrastructure such as access to internet, television, radio and other media of studying. In addition, United Nations Children's Fund (UNICEF) and Malawi government are exploring the application of radio technology to deliver content and lessons potentially to all levels of learners (WBO 2020). This entails that, there will be procurement of solar powered radio for rural families to ensure no family is left behind and availability of teaching and learning materials which learners can have access to.

Thirdly, to ensure continuity of teaching and learning in this presence of COVID-19, on 8 April 2020, the government of Malawi (GoM) officially launched the COVID-19 national preparedness and response plan, the plan articulates 10 operational clusters, they are health, education, protection and social support, water, sanitation and hygiene, food, security, transport and logistics and inter cluster coordination (UNICEF 2020). The concern here is on education cluster, the overall goal of the national response plan of education is to ensure coordination and make available oversight for continuous teaching and learning through innovative solutions and enabling environment in both rural and urban communities, with special attention giving to all adult learners irrespective of their status. All these innovative measures put in place by government of Malawi is to ensure continuity of educational system and maintenance of quality and standards of education in Malawi.

South Africa

According to the South African department of health, as at 30th of July 2020, the country had 482,169 confirmed cases of COVID-19. Universally, one of the first measures taken to curtail the spread of COVID-19 is the closure of schools and higher institutions. This has affected over 1.576 billion learners, constituting slightly over 91% of enrolment (Ngware, 2020). In South Africa, about 297 million learners have been affected, their instructors and resources have been underutilized for a while (Ngware, 2020). In order to keep abreast educationally with what is obtainable in other countries, South Africa government has employed educational technology (EdTech) process of learning to close the teaching and learning gap, also virtual classrooms television (TV), radio and online platforms have been activated to support learning at a level that the country has not seen before, learners continue to study through mass communication and internet-based resources. The COVID-19 pandemic brought an opportunity to intensify education technology in South Africa. This could lead to not depending on learning centres instructional delivery, also creating an ecosystem that allows learners in public and private institutions access digital learning materials.

According to Ngware (2020), the government recommended YouTube, sound-cloud, Twitch and Audio-Mack to strengthen teaching and learning, because these platforms allow for recorded learning content to be downloaded online onto a device and then played later by a user at no cost. It is obvious that, the methods are cost-effective. These platforms argument other media use in teaching and learning, and they are helpful, because they are after the pleasantness of bestowing a class in video or sound format, learners can choose which they prefer. The use of Skype and WhatsApp, audio and video for learning were also suggested by the government and are in use (Ngware, 2020). These tools constantly help facilitators to be in touch with their learners, presenting directions on their research projects and the completion of their works. These tools are easily available and popular, learners enjoy using

them because of its convenience and flexibility in allowing the learners to use at their time and place and in a manner which suits them best. Another educational delivery platform is the academic conferences, the alternative is web–conferencing (Ngware, 2020). This platform offers opportunities for networking and collaboration with scholars or learners locally and internationally. It also allows multiple users in different locations and cheaper than physical attendance. South Africans are now seeing e-learning as an efficient and effective way of delivery lessons or courses on online, the resources are available from anywhere and at any time.

IV. IMPORTANCE OF E-LEARNING TO ADULT LEARNERS

E-learning is supremely good in the sense that, it is learner-centered, it accommodates learners preferences and needs, it empowers learners of various backgrounds to have equal access to the best resources and referral material, lecture sessions, tutoring and so on (Hilai, 2013). With the emergence of COVID-19 pandemic, there is necessary need for e-learning in all institutions globally today, prompting all adult learning centres and educational institutions to re-examine the way that education is delivered. In reaction to this changing situation, e-learning is being implemented occurring frequently in higher institutions, bringing in new and exciting opportunities for learners and educational institutions. E-learning is cost effective as compared to traditional forms of learning, the online method of learning is best suited for everyone, lectures can be taken any number of time, and it offers opportunity to update content, fast delivery of lessons and reliable (James, 2019). He further says that e-learning is an expedient tool for potentially all adult learners, it provides financial aids such as scholarships, grants and federal loans. E-learning forms a sense of connectivity among adult learners from different countries, because there are interactive sessions held twice a week where adult learners from different countries talk on a particular topic in their respective academic areas of endeavor. According to Dokubo (2013), e-learning gives leeway for potentials adult learners to lean at their own time and pace that they would not otherwise have. For adults with physical disability, it gives them flexible learning opportunities as they are motivated to obtain lessons from the comfort of their homes without constrain and limitations. It is obvious that, most of the time, adults have to study and since work and family commitments vary from time to time attendance at daily or weekly classes can be a problem for adults. E-learning therefore does not have fixed time table activities, thus bringing the adult- learners into the picture for better and increased participation in educational career. It is a truism that, from all indications, learning through the process of e-learning is more result-oriented.

V. CONCLUSION

COVID-19 is a Public health crisis that has placed devastation on every sector of economy of which education is inclusive. In today's knowledge economy, learning is needed to survive

and to thrive, this is to say that, knowledge is power and proliferation of knowledge through e-learning is needed and should be encouraged globally, it should be seen as a necessity for current and future generations. The need for e-learning is constant, it is the present level of learning with the use of varieties of technology. Every country is getting online and countries that are not doing so are missing out on the immense power of this modern age wonder adopted globally. Everyone can access education no matter the location, because online learning helps to eliminate borders and barriers both social and physical especially in this era of COVID-19 pandemic. The e-learning opens the door to largely access knowledge, high quality education and training for learners. The different media use in learning help the learners to acquire knowledge and improve their skin for lesser costs but in spite of the flexibility and convenient nature of e-learning to learners, there is always a difference that exists between the developed and developing countries in implementing the e-learning, and its growth is the reason as number of computer they possess, the technology used and availability of internet. Since learning is the key for success and growth in the life of individual, organization, institution and nation at large, the developing countries should view the development of e-learning as the responsibility of government and not only the responsibility of the individual or concern institutions by providing a vision or guiding framework for the development of e-learning that will bring about increase development of adult learning centres globally.

VI. RECOMMENDATIONS

1. As a result of the emergence of COVID-19 pandemic in China, there are high rate of anxiety, depression, hazardous and harmful alcohol use, to address this mental health situation in this presence of corona-virus, Chinese government should implement multi-faceted approach that is, forming multi-disciplinary mental health team, providing psychiatric treatments and other mental health services, utilizing online counseling platforms, rehabilitation programs and ensuring certain care for vulnerable people.

2. The Nigeria Federal Ministry of Education should devise more effective e-learning strategies education interactive platforms and to create an enabling e-learning environment for adult learners for effective instructions.

3. Malawi as one of the developing nations in the world, should improve in the current online learning measures that are already in place as to get to the use of rural populace in Malawi.

4. The government of South-Africa should design and make more available alternative contextualized cost-effective learning delivery channels that could outline COVID-19 pandemic.

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