

ROLE OF VIRTUAL LEARNING ENVIRONMENT ON STUDENTS' PERFORMANCE IN POST COVID -19 ERA

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Abstract

This paper examines the effect the Covid -19 pandemic had on the students' performance especially in the aspect of virtual education, factors affecting students' performance were examined. This paper is of the view that virtual education has helped students to improve in their study and assisted those preparing for major exams to be able to cover their syllabus as a result of learning through the e- learning medium. This paper recommend that the government should ensure adequate provision of devices, laptops and internet facilities in order to ensure that students' performance improve.

Keywords: *Virtual education, electronic learning, performance, students.*

Introduction

Corona virus disease (covid-19) pandemic is caused by severe acute respiratory syndrome (SARS COV2) as stated by the World Health Organization (WHO). According to Chinese preventive medicine Association (2020), it was accounted that Pangolins are the most likely intermediate host of the virus. The first transmission to humans was in Wuhan, China. The virus spreads through person to person contact and also through close contact with an already infected person. When people with COVID-19 breathe out or cough, they expel tiny droplets that contain the virus. These droplets can enter the mouth of someone without the virus, causing the spread of infection to occur. Majority of patients experienced fever, dry cough, shortness of breath, fatigue, muscle pain, headache, sore throat, diarrhoea, vomiting amongst others. The first case was reported in Nigeria by the Federal Ministry of Health on 27th February 2020 by an Italian citizen who came to Nigeria on the 25th February 2020. Since then the number of confirmed cases of infection keep rising both in Nigeria and across the globe and on the 11th of march 2020, World health organization (WHO) declares covid-19 as a pandemic. A pandemic is a disease that has spread across a large region and had constituted a public health emergency of international concern.

Before now there has been different plagues like the black death (1346-1353) that travelled from Asia to Europe, living devastation in its trail. Also Spanish flu (1918-1920),

Asian flu (1957-1958) that originated from China claimed more than 1 million lives worldwide. In addition, Ebola epidemic (2013-2016) ravaged the West Africa countries with over 28,600 reported cases and 11,325 deaths in Guinea, Liberia and Sierra Leone (Broad host, Brooks, Rolloch, 2016). All these pandemic has affected the educational process in several ways leading to closure of schools which caused serious setback for learners and deprived them of their right to education and position them to future risk (UNESCO, 2020). Efforts to curtail the spread of Covid 19 through non –medical interventions and preventive measures such as social distancing and self-Isolation have promoted the wide spread closure of primary, secondary and tertiary schooling in over 100 countries. Also as part of the measure to contain the spread, markets, religious gatherings, club meetings, parties, ceremonies were closed down (Parke 2020). While some private schools in urban areas are engaging their students through online teaching, a large number of students who are less privileged or are in rural areas were left out (UNESCO 2020).

Most schools lack facilities which hindered them to partake successfully. The closure of schools did not only interrupt the teaching of students around the world, it also coincides with a key assessment period in which many external examinations like Senior Secondary School Certificate Examination (SSCE) and Nigeria Examination Council (NECO) have to be postponed in Nigeria.

Virtual Learning Education

Virtual learning or electronic learning can be described as online delivery of information and integration of learning with technology (Okure, 2018). It is an instruction delivered through digital technology such as CD rom, the internet and private networks. Through the use of computer, the online aspect can be audio, visual and audio/visual. It can be computer based key, line band learning, virtual classroom and digital collaboration where content is delivered via internet, intranet, extranet, audio or video tapes, satellite TV, CD Rom (Islam, 2014). It is a process of using online classroom environment to disseminate information (Kap & Gwan, 2020). It involves some digital technologies that permit teachers and students not to be present in the same room. It can easily be used in a time of social distancing and self-isolation.

Before now, digital technologies have helped us in the area of health, education, social and economic life through online teaching, open teaching, web based teaching, computer mediated teaching, blended teaching. They have the ability to use a computer or mobile phone connected to a network, radio, television set that offer the possibility to teach from anywhere at any time, in any rhythm, and by any means (Cococar 2014). The students can be at home and still enjoy the lesson.

There are two forms of virtual learning the synchronous learning which is structured in a way that students attend live lectures that are real. It gives room for interactions between educators and learners and there is possibility of instant feed lack. It provides a lot of opportunities for social interaction. The Synchronous learning environment are not properly structured as learning content is not available in form of

lectures or classes. It is available at different learning systems and forum. Also instant feedback and immediate response are not possible under such an environment (Lithe field 2018).

Aiyehi (2017) said virtual education has played a vital role in the past by helping some institutions overcome the barriers of education continuity in the time of global crisis. Examples of these include University of Cameroon and university of Centerburg during earthquake in 2011(Adamawa 2011). Some states like Lagos, Aba, Enugu, Ondo, Akwalbom Nasarawa, Imo and Ekiti in Nigeria practiced virtual learning on radio and television in Nigeria. It requires elaborate lesson plan design, teaching materials such as audio and video contents, technological support teams. Some private schools make use of some online applications to engage their students while the school doors were physically closed. Educators can use a combination of audio, video and text materials to reach out to their students in order to maintain a human touch to their lecturers. This has also helped in creating a collaborative and interactive learning environment where students can give their immediate feedback, ask questions and learn interestingly. In Nigeria, school opportunity is correlated to income level, private schools serve learners from higher socio-economic background who are willing and able to pay more to access the better resources offered by private schools. Public schools which are usually owned by government comprised of students from lower socio economic household and low income earners. They experience poor infrastructure, lack of electricity, no internet connectivity e.tc. Opportunities to learn at home are limited, given that a parents' ability to provide education support for their children will be shaped by their own level of educational attainment and income level. Given also for children from poor background who tend to have less access to internet connectivity, computers and reside in rural areas, where local languages take dominance over English, ICT learning intake will be limited. This inequality in access to ICT based learning has adverse effect on students learning, and this further increases the existing disparities in learning outcome and socio-economic differences.

Advantages of Virtual Education

Online education is a student-centered method of learning that offers a great deal of flexibility considering time and location. It has proven to be one of the methods of teaching that has the ability to rescue the education sector from hard times of global pandemic. Stated below, according to Ankul and Abridoo 2016, are some of the advantages of virtual education:

- N It brings about modification of procedures and processes based on the needs of the students.
- O It has advantages to function in time of crisis such as man-made disasters, natural disasters or pandemic. Allow interaction with students on the platform.
- P It would transform the education sector by eradicating manual processes across and replace them with modern and dynamic online digital learning which will eventually create more interactive learning environment for students.

- = Virtual education allows students to learn at their own pace by attending online classes.
This allows students to learn at their own pace.
- 5. It brings about infrastructural development in terms of building, increases satisfaction and decreases stress brought about by travelling.

Challenges of Virtual Education in Nigeria

1. Poor power supply: irregular power supply has been an obstacle to the program, many Nigerians cannot boast of regular supply of electricity per day, and this has a greater impact on students living in the rural areas negatively. (Emeka, 2010)
- & Virtual learning is costly and time consuming. A considerable amount of money is needed for the acquisition of the devices, equipment, training the human resources, developing the online content, and buying of data.
- & Lack of technical knowhow on the part of the teachers and students. Teachers, facilitators and students face a lot of challenges while preparing for online lessons due to lack of adequate technical training (Ceulson 2020). Students may face challenges in assessing the online lessons as most of them are not technologically oriented.
- & High poverty level among Nigerians, not all teachers and students have access to all digital devices, internet and Wi-Fi that are needed in carrying out virtual learning. The most affected are students in the rural areas, most are not equipped to adapt to new methods of learning. Parents cannot afford three square meals for their children, this has also contributed to their inability of buying mobile phone, laptop and data (Adeola, Adewale and Alese, 2013). Also, some parents don't have the time to stay with their children while learning in order not to damage the devices especially show learner who may not comprehend easily. There is need to bridge the gap between slow and fast learners.
- & Flexible nature of online education may not be of help to lazy students in the sense that instead of them to learn, they will use the time for chatting, watching video, playing games because the teachers are not visible . They find it difficult to assess the students for examination with different schemes of work.
- & Lack of conducive environment for learning at home. Distraction from noise, internet connectivity and other activities in the surrounding may prevent adequate virtual learning at home.

Way Forward

1. Empower learners – As stated by mutual policy on education, 2004, engaging learners with more active learning process will enable them have responsibility and achieve their personal goals as self-directed lifelong learners.
2. Creative and innovative teaching and learning of curriculum could be more creative and innovative in preparation for 21st century global knowledge society.

1. Virtual learning offer flexibility- A more response education system that adapt to the needs of all learners wherever and however they need to learn. National policy on education recognize equal education for all citizens which can be achieved through e-learning.
2. E-Learning help in achieving better value education leaders, evaluators, lectures and learners could develop innovative ways and deploying their resources, exploiting e-learning with other teaching methods to improve quality of school education.
4. Generating a professional work force and fulfilled citizens. It would enable us work free and fulfilled to continually update their knowledge are skills. This will help to transfer knowledge and contribute to knowledge in all its forms as stated by national policy education.

Conclusion

Through virtual learning large number of students can be taught by a single teacher at the same time. For students that were not able to participate in the online class and schooling due to Covid-19 the effect will be felt in the economy and in the society in years to come. Although Covid-19 seems to be a disaster, the challenge has brought opportunities for advancement in science, education and technology through virtual learning. However, accessibility affordability, flexibility, suitable education polices are some of the challenges. Government should see it as an investment that will be more productive by incorporating it into the school time table.

Recommendations

1. Government should build on the opportunity the virtual learning offers by providing stable electricity and internet provider to support the fast learning and teaching.
2. Basic knowledge on how to operate computer and computer related tools should be given to both students and teachers. They should be prepared said trained for creative interactive and student centred lessons.
3. Parents should pay personal attention to monitor, and supervise their children until they adapt to online teaching environment.
4. Curriculum planners should integrate effective practical attainment strategy for learners of E- learning

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