BENEFITS AND CHALLENGES OF ONLINE LEARNING IN THE ERA OF COVID-19

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Abstract

Covid-19 is a pandemic ravaging the entire world. The outbreak of Covid-19 has forced the educational institutions to shift from the traditional method of imparting knowledge to digitalization method. Online learning then becomes the accepted conveyor through which teachers keep their students active. This paper, therefore, examined some of the benefits and challenges of online learning. The study employed the survey method with the use of questionnaire to gather its data. Two (2) research questions were developed from which instrument used to gather data was designed. The population used for the study consisted students of some selected secondary schools in Yewa South Local Government Area of Ogun State. One hundred and sixty (160) respondents were randomly selected from the population as sample size. Data collected were analyzed using mean method. Findings revealed among others that scheduling flexibility and pacing option are primary benefits of online learning. Despite these benefits, there are challenges such as lack of infrastructure, unavailability of steady power supply and unstable internet connection among others. The paper therefore, recommends that proper infrastructure such as reliable computer networks, broadband connectivity etc. that will support the online learning should be put in place so that the programme can become an integral component of educational system.

Keywords: Covid-19, Education, Online Learning, Benefits and Challenges.

Introduction

The coronavirus disease otherwise known as COVID-19 is a communicable respiratory disease ravaging almost all nations of the world. It was first reported to World Health Organization on the 31st of December, 2019 in Wuhan, China. The disease spreads from person to person through infected air droplets that are projected during sneezing or coughing. It can also be transmitted when humans have contact with hands or surfaces that contain the virus and touch their eyes, nose, or mouth with the contaminated hands.

As at 15th of August, 2020 in Nigeria, 48,770 confirmed cases which comprises of 31,299 male and 17,471 female were reported, out of which 36,290 discharged, 974 dead, and 11,506 were active (NCDC, 2020). Scientists and other experts are still trying to find vaccine or medication that would cure the disease. The precautionary measure being advised by experts are washing of hands, putting on face mask, social distancing etc.

The sudden outbreak of this pandemic (Covid-19) has totally disrupted the education system globally. The panicky attached to this pandemic had forced the Federal Ministry of Education to announce on the 19th of March, 2020, the temporary shut-down of all schools in Nigeria, taking effect from 23 March, 2020 in a bid to curb the spread of the disease. Educational institutions have then, been mandated to embark on online learning to keep the students as well as the teachers active till solution to this pandemic is found. Some state governments like Ogun and Lagos have been using local media channels such as radio and television programmes to reach out to learners. This has made educational system to move from traditional face to face method of teaching to online teaching whereby teaching is undertaken on digital platforms.

According to India education (2006), online learning is an electronically supported learning that relies on the internet for teachers and students interaction. It is a formalized teaching and learning system specifically designed to be carried out using electronic communication. The learning experiences may be in synchronous or asynchronous environment (Cranton & Thompson 2014). The synchronous learning environment is structured in the sense that
students attend live lectures though at different locations. In this method, there are real-time interactions between teacher and students, and there is a possibility of instant feedback. Thus, both students and teachers who are involve in the programme log-in into the virtual platform at the same time using video or teleconferencing, online chats, discussion forums, virtual classrooms, zoom, etc. Synchronous online learning provides a lot of opportunities for social interaction. Asynchronous learning environments on the other hand are not properly structured. In such a learning environment, learning content is not available in the form of live lectures or classes; it is available at different learning systems and forums. It is a situation where each student and teacher logs in at different times. Instant feedback and immediate response are not possible under such an environment (Littlefield, 2018).

Online learning generally has a variety of benefits available but earlier it was not accepted wholeheartedly as it was assumed that this system lacked the human element required in learning. However, it is clear that the appearance of Covid-19 pandemic has allowed online learning to boom as most educational institutions have switched to this method. This crisis will be a new phase for online learning and will allow people to look at the fruitful side of e-learning technologies (Dhawan, 2020). For many learners, the primary benefits of online learning involve flexibility and self-paced learning (Broderick, 2020). When student learns at his or her pace, learning becomes flexible (MindIQ) and convenient for the student thereby reducing stress and increased satisfaction and self-motivation compared to the traditional classroom setting where student has no other option but to go at the teachers’ pace. Other benefits of online learning includes better time management, a broader global perspective, refined critical-thinking skills, self-discipline, and lower tuition and fees (Miller, 2019).

Despite the above benefits, there are however, numbers of challenges associated with this modern technology. The most prominent challenge of online learning is lack of infrastructure. Infrastructure is the foundation on which online learning must be built (Philips & Wellman, 2002). Infrastructure, which includes technical and building infrastructure and all web accessible technologies, are needed to support and even enable online learning in an institution. It also involves a lot of money: amount of investment needed for getting the devices and equipment, maintaining the equipment, training the human resources, and developing the online content must be considered (Dhawan, 2020). Another challenge is that not every student and teacher has a personal gadget to use for online learning. The need for steady and continuous power supply cannot also be over emphasized. It is a norm to experience power failure everyday, and it is also common to have low voltage supply of power that does more harm than good. When power is not continuous and steady, the goal of accessing or delivering material anytime and anywhere is defeated (Iloanusi, 2007). Other challenges are unstable internet connection, high cost of data plan and lack of human interaction as students were used to face to face communication with colleagues and teachers, sharing their experiences and feelings together which strengthening their social skill. It is also not suitable for discipline that involves practical (Armstrong, 2013).

In view of the above challenges, online learning should be seen as a complement and extension of classical forms of learning. Not even the best online course can fully replace the personal contact with a teacher or the human relationship that develop in a group.

The study therefore, investigates the benefits and challenges of online learning in the educational development during Covid-19 Pandemic at secondary school level in Yewa South Local Government Area of Ogun State, Nigeria.

Research Question

The following research questions were raised on this study.

1. What are the challenges of Online Learning during Covid-19?
2. To what extent does Online Learning contribute to Educational Development in the Era of Covid-19?

Methodology

The study was a survey and carried out in Ilaro and Owode-Yewa of Yewa South Local Government Area of Ogun State. The population was stratified to students and teachers of some selected secondary schools in Ilaro and Owode-Yewa. For adequate representation, a total of 160 respondents (120 students and 40 teachers) were selected using simple random sampling technique. Two (2) research questions were developed from which instrument used to gather data was designed. A structured questionnaire was the main instrument used for data collection. The instrument was validated by experts and their advices were taken into consideration in preparing the instrument. The reliability of the instrument was established using the Test-Retest method. The instrument yielded a reliability coefficient value of 0.88. The instrument contained nineteen (19) questions which sought to examine the benefits and challenges of Online Learning in the Era of Covid-19. Each item in the questionnaire was provided with four (4) options in likert rating scale as follows: Strongly Agree, Agree, Disagree and Strongly Disagree with a nominal value of 4, 3, 2 and 1 respectively. One hundred and sixty (160) copies of the questionnaire were printed and administered to the respondents out of which one hundred and twenty (120) were duly completed and returned. In determining the acceptability of the research questions, a minimum score of 2.5 was set as standard. Any item that falls below the standard was rejected.

Results

Table 1 represents the challenges of Online Learning as claimed by the respondents while Table 2 presents the respondents opinion of the benefits of Online Learning.

Table 1: Challenges of Online Learning

<table>
<thead>
<tr>
<th>S/No</th>
<th>Challenges of Online Learning</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>Mean</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lack of digital skills</td>
<td>20</td>
<td>70</td>
<td>20</td>
<td>10</td>
<td>2.8</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Unstable internet connection</td>
<td>36</td>
<td>72</td>
<td>8</td>
<td>4</td>
<td>3.2</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>Cost of internet data plan</td>
<td>99</td>
<td>16</td>
<td>2</td>
<td>3</td>
<td>3.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>Lack of interest</td>
<td>40</td>
<td>70</td>
<td>8</td>
<td>2</td>
<td>3.2</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>Lack of infrastructure and basic amenities</td>
<td>97</td>
<td>15</td>
<td>5</td>
<td>3</td>
<td>3.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>Lack of human interaction</td>
<td>36</td>
<td>72</td>
<td>8</td>
<td>4</td>
<td>3.2</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Cost of digital devices</td>
<td>84</td>
<td>26</td>
<td>6</td>
<td>4</td>
<td>3.6</td>
<td>Accepted</td>
</tr>
<tr>
<td>8</td>
<td>Restriction to changes</td>
<td>20</td>
<td>62</td>
<td>28</td>
<td>10</td>
<td>2.8</td>
<td>Accepted</td>
</tr>
<tr>
<td>9</td>
<td>Financial limitation</td>
<td>24</td>
<td>80</td>
<td>12</td>
<td>4</td>
<td>3.0</td>
<td>Accepted</td>
</tr>
<tr>
<td>10</td>
<td>Unavailability of steady power supply</td>
<td>102</td>
<td>15</td>
<td>2</td>
<td>1</td>
<td>3.8</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

(SA = Strongly Agreed, A = Agreed, D = Disagreed, SD = Strongly Disagreed)

The results of the data in table one above shows that all the respondents agreed to the items listed as challenges of online learning. This was observed from the responses of the respondents which showed mean scores of not less than 2.5 in all the items listed.

Table 2: Benefits of Online Learning

<table>
<thead>
<tr>
<th>S/No</th>
<th>Benefits of Online Learning</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>Mean</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Time flexibility</td>
<td>98</td>
<td>17</td>
<td>2</td>
<td>3</td>
<td>3.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>12</td>
<td>Wide accessibility by audience</td>
<td>36</td>
<td>72</td>
<td>8</td>
<td>4</td>
<td>3.2</td>
<td>Accepted</td>
</tr>
<tr>
<td>13</td>
<td>Wide availability of courses</td>
<td>84</td>
<td>26</td>
<td>6</td>
<td>4</td>
<td>3.6</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
The results of the data in table two above shows that all the respondents agreed to the items listed as benefits of online learning. This was observed from the responses of the respondents which showed mean scores of not less than 2.5 in all the items listed.

Discussion of Results

The first research question sought to investigate the challenges of online learning during Covid-19 pandemic. From the data gathered and analyzed, all the respondents agreed that online learning has some challenges. Prominent among these challenges are lack of infrastructure, digital skill, unstable internet connection, cost of digital devices and data plan. The result was in line with the assertion of Iloanusi (2007) when he identified the huddles to implementing e-learning in higher institutions in Nigeria. He identified lack of infrastructure and basic amenities, unstable power supply, lack of motivation in learning, cultural rejection and isolation, high cost of development, implementation and maintenance among others. The outcome of the study also collaborates with the assertion of Armstrong (2013) in his study on the advantages and disadvantages of online learning. According to him, gadget shortage, connectivity, computer literacy, adaptability struggle, technical issues, time management, and lack of interaction among others are some of the challenges facing online learning. All these according to him will discourage and frustrate both teachers and students during the programme.

The second research question sought to identify the benefits of online learning during Covid-19 pandemic. It was observed from the data collected and analyzed that online learning has some benefits towards the educational development. According to the respondents, career advancement, scheduling flexibility, self-paced learning, a broader global perspective and skill development are core benefits of online learning. These collaborated with the assertion of Broderick (2020) in his study on relevance of online education. According to him, there are benefits derivable from online courses. The benefits include improved virtual communication and collaboration, refined critical-thinking skills, improve technical skills and so on.

Conclusion

Online learning is a programme that provides inclusive education when used to its fullest most especially during crises. Such systems need to be developed in educational institutions to ensure that no student is being deprived of education due to their location, social class, ethnicity, and so on. Online methods of teaching also support and facilitate learning–teaching activities, but there is a dire need to weigh the pros and cons of technology and harness its potentials. Disasters and pandemic such as Covid-19 can create a lot of chaos and tensions; therefore, there is an important need to study the technology deeply and with due diligence to balance these fears and tensions amidst such crisis.

Recommendations

Based on the findings of this research work, the following recommendations are made:
- Government should provide infrastructure such as computer networks, broadband connectivity and administrative buildings that will support and enable online learning so as to form the integral part of educational system.

- Government should also mitigate the negative impact of Covid-19 on education by investing in the provision of solar-powered educational gadgets, pre-loaded with offline academic resources to learners.

- Government should also partners with telecommunication companies to offer free or subsidize mobile data packages for learners.

- Teachers and students should be more engaged in synchronous activities rather than asynchronous to familiarize themselves to the use of the devices.

- The less privilege students should be supported with the digital devices required to work on.

- Lastly, online learning certificates should be recognized as part of job credential requirements.

References


