



Perception of Students' in Public Higher Institutions in Nigeria on E-Learning as a Result of Covid 19: Issues, Challenges and Observations

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ABSTRACT

The outbreak of COVID 19 in the early year 2020 has caused a major collapse in the Economic of most countries in the world and the Educational sector is not left out. Most activities in the entire world have been brought to an abrupt stoppage with the Government giving an order of sit at home to most citizens in other to curtail and reduce the spread of the disease. The order has also effected students generally especially in most higher institutions to compulsorily sit at home and receive lectures online so as to ensure that the school calendar is not much affected. Therefore, this paper emphasizes on the issues, challenges, observations and necessary solutions to making the online learning effective in higher educational institutions in Nigeria. In the course of this study, an online survey was carried out to know how satisfied Nigerian higher Institutions students are with the online learning and also to know the issues and challenges they have encountered during the course of the online teaching. The outcome of the survey indicated that the online learning will be more appreciated if certain issues and challenges are attended to by the Government and the managements of higher institutions so as to improve the quality and expected result from the online learning. Some of the issues and challenges encountered by the students are due to economic challenges in the country such as the high level of poverty in the country which has handicapped some parents to purchase an android phone that can be used for the online learning and some the inability to consistently purchase data, network issue is also a limiting factor in the effectiveness of students participation in the online teaching, adequate explanation, proper understanding and little or no adequate knowledge on the usage of the E-learning platform.

KEYWORDS: COVID 19, E-Learning, Institutions and Perception.

1. INTRODUCTION

Educational system has never been affected on such a large scale like what we are experiencing at the moment before. (UNESCO Director-General Audrey Azoulay, 2020). Online education as a way-out to this problem has been encouraged by most academic leaders (UNESCO, 2020). A reasonable numbers of schools from the basic to higher institutions of learning have been forced to stay at home with their parents so as to keep themselves safe thereby having a negative effect on the academic calendar (UNESCO, 2020). Due to the present pandemic all over the world, most academic activities have been suspended in higher institutions of learning (COVID, 2020), as a result, any decision to be taken must be thoughtfully and accurately taken because it might forever have an effect on academics. It should be noted that online is not a substitute for the physical learning. Well known institutions are now more into online learning and thus substituting it for physical learning (Bao, 2020).

The best ranking Universities in the world like Tsinghua, Cambridge, Yale, Oxford, and Harvard and so many prefer more of online learning to face to face delivery (Bao, 2020, Picciano 2017). To go entirely online for learning processes require adequate planning and greater investments from all sectors (Bao, 2020).

It is necessary for institutions to evaluate the issues before commencing the online teaching such as a working platform that an instructor can use in recording, giving materials for easy access by the students in their various homes, and if students lack the necessary materials such as laptop/tablets or a good phone, thus nothing good can come out from their teaching (Filius et al, 2019). The teething effects can only be felt due to the high speed at which Universities in China



have been instructed to commence online teaching to protect the lives of their students as a result of the pandemic (COVID 19) which has brought about a standstill in the region activities (Bao, 2020}.

Government shutting down of higher institutions and all campuses worldwide has improved the virtual delivery of greater number of courses. Although, a large number of problems of teething that cannot be avoided has emerged. A report according to observers is that it is under certainty that the future might have become the present (Bao, 2020, Donitsa – Schmidt & Topaz, 2018; Filius et al., 2019). There has been technological advancement in education field in the last two decades with increase in the level of digital learning effectiveness and sophistication which has been embraced by a number of schools (Murphy, 2020). Study carried out by UNESCO, (2020) indicate that more than 1.5 billion learners from 165 different countries in the World have been attracted by COVID 19 school closure which is 87% of the World student population. Higher institutions of learning have been experimenting the outcome of e-learning on their students as the medical staff personnel's of such institution are working hard to find a solution to the pandemic that have infected more than 100,000 people and about 4000 that the disease has succumbed (UNESCO, 2020; WHO, 2020)

According to reports, a number of reasons have been attached to students' better and effective learning through online studies. From the report, control and opportunities over studies for further reflection is at the disposal of the students (Picciano, 2017; Wang & Hu, 2019). From another survey that was conducted by think-thank the 'Times Higher Education' on higher learning prospective from the view of leading Universities leaders in 2018.

Studies have shown that about 200 respondents from 45 countries were contacted to know the best amongst online education and physical teaching method. It was revealed that online education cannot be compared to physical teaching methods. However, Researchers have proved that in the nearest future, e-learning will be as effective as the school based physical teaching (Murphy, 2020 and UNESCO, 2020). Hence, the objective of the study is to enquire the issues, challenges and observations encountered by students in public tertiary institutions in Nigeria on e-learning as a result of COVID 19 Pandemic.

2. METHODOLOGY

This study is based on online survey from public Institutions in Nigeria carried out through various schools academic platforms of students. The main aim of choosing Public institutions is because the online learning system has just been newly introduced to the students since the students are first timers there is tendencies to have some challenges.

3. SAMPLING

Questionnaires were distributed to different higher institutions of learning on different platforms like Whatsapp and Facebook groups respectively. The 20 sampled groups had an average of 150 active members who participated in the survey. Data were collected between July 25th and August 20th from various platforms, for the purpose of the survey. The questionnaire was adopted according to e-learning requirements with most possible challenges encountered by students during the course of the learning.

A total of 3000 questionnaires were distributed and out of the 3000 questionnaires administered, 2600 survey questionnaires were responded to and 400 were not returned for accountability which translates to an approximate of 87% response (Creswell & Poth, 2016 and Babchuk 2017) cited that a study with 50% and above response rate is appropriate for analysis. Thus, the response rate of 87% is a very good one for data analysis.

4. RESULTS

The result above is based on the questions that were provided to the students with the purpose of investigating the challenges encountered by students during this pandemic period on Online Learning in Public Higher Institutions of Learning. During the study, 3000 questionnaires were given out to the respondents, out of which 2600 were valid.

Sex of Respondents



Table 1; shows the total number of respondents with the frequency of two options, first is 'Female' 1400 with the percentage of 53.8 the second is 'Male' 1200 with a percentage of 46.2.

Table 2; shows the percentages of students with the various challenges encountered during the online learning based on the survey carried out.

Table 1: Sex Respondents

| | Frequency | Percentage | Valid percentage | Cummulative Percentage |
|--------|-----------|------------|------------------|------------------------|
| Female | 1400 | 53.8 | 53.8 | 53.8 |
| Male | 1200 | 46.2 | 46.2 | 100.0 |
| Total | 2600 | 100.0 | 100.0 | |

Table 2; Challenges encountered during the online learning by the students

| | Agree (%) | Neutral (%) | Disagree (%) |
|--|-----------|-------------|--------------|
| Lack of Android phone for the learning | 65 | 5 | 30 |
| Inability to Consistently procure data | 65 | 5 | 30 |
| Little know how of the online platform | 60 | 7 | 33 |
| Network issues | 80 | 4 | 16 |
| inadequate electricity supply | 75 | 3 | 22 |
| Inadequate illustrative examples | 70 | 6 | 24 |

5. DISCUSSION

It is no longer a news that the poverty level in Nigeria is on the high side with very few number of parents on the middle class and fewer on the top of the pyramid in which most of the students from the poor family are those that attend the public schools the most and are often faced with the problems of inability to secure an android phone for the purpose of e-learning and the inability to purchase data to participate in the new teaching method. The most essential tool needed for the e-learning is a browse able mobile phone which has been a major challenge for most students who do not have an android phone and also a challenge to those whose parents are financially handicapped to procure one for such student. Thus, becomes a very difficult challenge that hinders the successful e- learning process as approximately 65% of students agreed closely to both. Again, a higher percentage of students have also identified another challenge faced during the course of the e-learning process which must be attended to before the programme can be a success, the 'inability to purchase data' has also been a limiting factor that is hindering the success of the e-learning system due to the fact that most parents cannot afford the continuous purchase of data for online classes, downloads of notes and participation in zoom classes from network providers which is a barrier to the successful implementation of the e-learning system of learning in most public higher institution of learning.

In order to tackle this challenge, the Nigeria Government should endeavor to create more jobs in the country that will raise the living standard of those parents in the lower classes. It is also imperative for Government to go into agreement with certain phone producing companies and import subsidized phones that can be afforded by students for the purpose of the learning and also meet with the network management and have a memorandum of understand on lesser prices of data procurement by students solely for the purpose of the online classes.

Again, It becomes a very big challenge if students that are been taught cannot make use of the teaching platform effective. From the survey carried out, only 40% of students can comfortably make use of the e-learning platform for learning purposes and a larger number of students find it very difficult to carrier out basic activities on the platform and as a result, students loss interest in the learning system .



For effective learning on each online platform, seminars should be carried out to enlighten students on the proper usage of the platform via zoom which will give them a better understanding on the usage of the learning platform or e-books should be provided by the institutions with step by step procedures for accessing the learning platform which will give students self-confidence and better knowledge of the online learning system.

More than 80% of the students who participated in the survey vehemently in support that the network issue has been a challenge to e-learning during this COVID 19 period. It has affected the smooth learning process both on the part of the students and on the instructor's part due to constant fluctuation of network or absence of network in the course of the learning, downloading of notes, submitting assignments and tests submission which has made some students to loss vital part of the class especially those living in remote areas of the country.

Network providers should employ or seek for assistance of professionals who can help to improve network connectivity and thus improve the network connection for more effective learning. This has also contributed to the challenges encountered during the online learning classes in this COVID 19 period with 75% of the participants agreed on poor power supply in the community. A larger percentage has attributed the failure to attend online classes to poor or no power supply in their community during this period of COVID 19 which is a limiting factor to students participation in the online classes and has also led to lesser comfortability doing the classes with more distraction while others with lesser complains are lucky to have a generator set to power their laptop or mobile phones from time to time which has made them active in the online classes.

For effective online learning the power sector should be looked into and necessary repairs work and upgrades should be done to improve power supply in the country. The usage of solar energy should be adopted by the Government since Nigeria is blessed with much sunlight to supplement the hydro power supply with much load on it.

From the survey carried out 70% of the participants argued that the online teaching method has not been that effective especially on courses that needs more of hands on the job experience. Some argued that visits to laboratories, workshop and factories has given them better industrial knowledge to the theoretical principles taught in class and thus giving them a better understanding of the course in question which in turn enables them to perform better in the examination and that such cannot be achieved with the online learning. While some complained they are lagging behind in practical oriented courses that cannot be done by merely writing of notes on the online platform without carrying out the practicals with the necessary apparatus for better understanding while others were more concerned about courses that entail calculation.

To solve the challenge, courses that entail practicals should be supported with a well labeled diagram accompanied with voice note for proper explanation of each part of the diagram. For courses that entails calculations and working principles of certain apparatus, a short video can be done with the necessary explanation by the instructor or the students can be given a link to view such working operation on YouTube which will bring about a better understanding of the courses.

6. CONCLUSION

A total of 3000 respondents participated in the study, 46.2% were males, and 53.8% were females. From the survey carried out, it was observed that lesser percentages of learners are contented with the online learning education provided by Institutions of Higher Education in Nigeria by random sampling. There were higher percentages of Students with negative perception of the non effectiveness and credibility of the online learning program as a result of various challenges that were encountered during the online Teaching and Learning. Based on the findings, it is clear that due to economic factors and poverty level in Nigeria, students are not satisfied with the online teaching and learning instituted by various Public educational institutions during the pandemic period which can be improved if both Nigerian Government and Public Institution's Management can work towards the recommendations provided.

REFERENCES



- Ananga P., & Biney, I. K. (2017). Comparing face-to-face and online teaching comparing face - to - face and online teaching. *MIER Journal of Educational Studies, Trends & Practices*, 7(2), 165-179.
- Babchuk, W. A. (2017). Book review: *Qualitative research: a guide to design and implementation* (4th ed.), by s. B. Merriam and e. J. Tisdell. *Adult Education Quarterly*, 67(1), pp 71-73.
- Bao, W. (2020). COVID -19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113-115.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry & research design: Choosing among five approaches*. (4th ed). SAGE Publications.
- Filius, R. M., Kleijn, R. A. M., Uijl, S. G., Prins, F. J., Rijen, H. V. M., & Grobbee, D. E. (2019). Audio peer feedback to promote deep learning in online education. *Journal of Computer Assisted Learning*, 35(5), 607-619.
- Murphy, M. P. A. (2020). COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemporary Security Policy*, 1-14.
- Picciano, A. G. (2017). Theories and frameworks for online education: Seeking an integrated model. *Online Learning Journal*, 21(3).
- UNESCO. (2020, March 13). *COVID-19 educational disruption and response*. Response Online Journal of Communication and Media Technologies, 2020 Online J. Commun. Media Technol., 10(3), e202018 9 / 9 Retrieved from <https://en.unesco.org/covid19/education>
- Wang, H., Pi, Z., & Hu, W. (2019). The instructor's gaze guidance in video lectures improves learning. *Journal of Computer Assisted Learning*, 35(1), 42-50.
- WHO. (2020). Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). *The WHO- China Joint Mission on Coronavirus Disease 2019, February*, 16-24. Retrieved from <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-COVID-19-final-report.pdf>
- Yang, F., & Li, F. W. B. (2018). Study on student performance estimation, student progress analysis, and student potential prediction based on data mining. *Computers & Education*, 123, 97-108.