Impact of Covid-19 on Open, Distance and E-Learning Mode of Delivery: A Selected Case of Nigerian Universities

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Abstract: The sudden appearance of the Covid-19 pandemic into the world has dramatically impacted on the learning process in various Nigerian Universities in such a manner that students now learn via online with total compliance to the NCDC guidelines to its curtail spread. In this context, this study tries to examine the impact of Covid-19 pandemic on open, distance and e-learning activities. The study employed descriptive/Analytical method and about eighteen (18) items questionnaire will be responded to by students of five (5) selected Nigerian Universities via online (Google form). Our findings reveal that the disease has affected education positively and negatively both. It has also created an avenue for Nigerian Universities to move swiftly toward providing learning to the students in order to ensure continuity in teaching and learning. Teachers at this period pass knowledge across board through e-learning and it has improved the ICT expertise of the learners and teachers both. We also gathered that examinations are being conducted via e-service and it has made our educational system. We recommended that more Nigerian Universities should try and introduce distance and e-learning into their academic system in order to become efficient and enhance their knowledge and skills.

Keywords: Covid-19 Impacts, Open, Distance and E-Learning, Nigerian Universities.

BACKGROUND TO THE STUDY

Covid-19 pandemic is a newly deadly disease firstly identified in Wuhan and China in December 2019 and worldwide data showed that as at August 2, 2020. It has affected about (18,23,614), 689,949 deaths and 11,332,080 people have recovered from it.

Sporadically, it has ravaged the face-face learning process between lecturers and students in the universities as it had led to closing down of schools world over with the sole aim of using the measure to curtail its spread. The COVID 19 pandemic has brought several challenges for both center as well as state government authorities to prevent the outbreak from snowballing further and to lessen its adverse effects on various social and economic sectors (Amita, 2020). The closure of schools was introduced to prevent contract among students and reduce cases.

However, UNESCO in its magnanimous way recommended that all educational programmes offered in various schools should be channeled via e-learning as a way of teaching the learners remotely in order to limit the disruption of education The Nigerian Government swing into action by making sure all schools are being closed down for the time being in order to flatten the curve and curtail the widespread of the pandemic among students in all levels of education. Fowler *et al.* (2020) reports that lockdown is effective in curbing the spread of COVID-19, but has huge impact on the economy.

It is worthy of note that in total compliance with this measure many universities of the world have resorted into conducting lectures to their students via e-learning and this has in many ways improved the ICT expert of students. Academic continuation in educational institutions have shifted rapidly to distance and online teaching (Subedi *et al.,* 2020).

This crisis has created an opportunity in academia for Nigerian Universities to reconstruct and reshape the educational system in order to dish out suitable educational practices for the present and future generation of learners. Covid-19 pandemic has also created gaps in educational activities like the open learning whereby proper monitoring of students behaviour and social interaction in the class are being exercised. It has also affected full participation of students in class discussion and feedback from students is very infinitesimal during this period because 70% of them do not have an I-phone to browse.

The impact has been dramatic and transformative as educators scramble to put in place

workable short-term solutions for remote teaching and learning, particularly in emerging markets, where students and schools face additional challenges related to financing and available infrastructure (Kandri, 2020).

This paper therefore, identifies the impacts of Covid-19 on open, distance and e-learning both negatively and positively and it has provided a succor for those in the academia to improve their ICT competencies in order to meet up with future challenges.

RESEARCH OBJECTIVES

- ➢ To examine the extent of how covid-19 pandemic affected open, distance and e-learning in Selected Nigerian Universities.
- ➢ To discuss the impacts of Covid-19 pandemic on Open, distance and e-learning in Selected Nigerian Universities.
- ➢ To provide the measures to put in place to improve open, distance and e-learning in Nigerian Universities after covid-19 pandemic.

Theoretical Framework

This study was carried out within the confines of the online collaboration learning (OCL). According to Hinda Haraism (2017), the theory specifically opined that e-learning is the fastest site whereby information can be beat gotten at the appropriate time. He as well describes the theory as a new theory of acquiring knowledge as one that is focused on collaborating learning, internet use, and knowledge building (Demuyakor, 2020), Haraism (2017) also noted that many benefits are associated with moving to teaching and learning to the internet and predict a large scale network of education being created from the concept of e-learning.

LITERATURE REVIEW

The sudden change in the mode of learning from the traditional face-to-face learning Aall over the world has also left many Nigerian Universities into receiving lectures via virtual. Bao, 2020: Donitsa-Shmidt & Topaz, 2018 noted that education in the future may likely hood look like how it is being impacted presently i.e Covid-19 pandemic period.

According to a study conducted by (UNESCO, 2020), over 1.5 Billion learners and 9.8 million African students had experienced disruption in their studies due to the closure of higher education institutions. In order to modify this submission, this study tends to state that it would have been appropriate if UNESCO had mentioned students in elementary schools as well because most of the primary and secondary schools too are experiencing such cut off on learning in point of the fact that most of them do not have access to the internet where knowledge is being impacted at this period.

Jacob *et al.* (2020) conducted a research and found out that the first case of coronavirus pandemic in Nigeria was first discovered in Lagos State on the 27th of February, 2020 whereby an Italian working in Nigeria that recently returned from Milan through the Murtala Muhammed International Airport, fell ill on 26 February and was transferred to Lagos State Biosecurity Facilities for isolation and testing. Since this period, the cases of Covid-19 have continued to rise beyond unexpected number leading to about 434 people being infected.

In another study conducted by Jacob *et al.* (2020) where he noted that Covid-19 pandemic had disrupted few educational services like international conferences, closed down of institution of learning, reduction of international education, disruption of academic calendar of higher institutions, cancellation of local and international conferences, creating teaching and learning gap, loss of man power in the educational institutions, and cut in budget of higher education. This study therefore attacks his view on the cancellation of international education because many educational services are being rendered via webinar world over since the beginning of the pandemic. International conferences are also being conducted via Google meet etc. It should be noted that 1001 conferences both local and international had been conducted via this medium and more are on the way.

Rajhans *et al.* (2020) conducted a study and concluded that COVID-19 pandemic and its disruptions have created an opportunity for the restructuring of the optometry educational system. The quick transitions to online mode assisted in keeping continuity of optometry education programs, effectively fitting in the purpose of completion of the cur-rent academic year. The journey from the tea steeping model of education to a competency-based learning program has commenced. Online teaching, use of internet technology in optometry education is set to become a new normal. The transition can be quick and smooth if educators and technical staff show an adaptive and collaborative attitude.

Subedi *et al.* (2020) in a study concludes that the attitude of student learning online and concluded that most of the respondents suffered from disturbances during online classes because of internet and electricity problem, also students were compelled to use data packs for their online classes. Although the course may be completed the objectives of students and college will not be fulfilled if the problems arising during online classes are not solved. Our present study accept the view of Subedi and recommended that it will do the students compelled to learn online a good favour if the educational institutions can monitor the activities of students via this process through the Google meet medium of transferring knowledge and this will go a

long way in achieving the school's objectives at this point in time.

Girik (2020) conducted a study and concluded that it can be concluded that the learners perception on online learning reveals that it is good in the midst of COVID-19 pandemic. The perceived online learning is very helpful in the middle of Covid-19. He went further to say that the study accepted that online learning is good but study not only report that online learning is good in the midst of COVID-19 pandemic but also spotted the light on the availability of internet access, financial issue, and online learning implementation.

Raheem *et al.* (2020) in a study noted that covid-19 pandemic has been helpful in making technology become an essential part of our daily life. E-learning, internet and computers have been used vitally in teaching and learning process. This study has proved and shown how e-learning and using applications such as Zoom, Teams, Veev, Google classroom and many others have been helping the students to study at homes in COVID-19 crisis. The present study accepts this view and concluded that if not for technology apparatus, many students would have been educationally rubbed and it would have led to students for getting all they have been taught before the disruption of the pandemic.

Research Questions
1. To what extent have covid-19 pandemic affected open, distance and e-learning in Selected Nigerian Universities?

2. What are the impacts of Covid-19 pandemic on Open, distance and e-learning in Selected Nigerian Universities?
3. What are the measures put in place to improve open, distance and e-learning in Nigerian Universities after covid-19 pandemic?

RESEARCH METHODOLOGY

The study employed triangulate method whereby primary data was collected via Google form and existing literature were consulted to explain detail of some concepts in the study. This form consisted of about 20 questionnaires i.e. four questions for each of the objectives of the survey. In total, 154 students of the responses seem very encouraging. Furthermore, the Google form remained open for submission for only two days from July 16 to 18, 2020.

Five (5) Universities i.e. Lagos State University, (LASU) Ojo; Obafemi Awolowo University (OAU); Ile-Ife, University of Ibadan; National Teachers Institute, Kaduna and National Open University were selected, where open, distance and e-learning are mostly used by these universities to impact knowledge on students.

Results of the survey were presented in the form of tables, charts, diagram etc., in order to make the results very understandable by an ordinary person.
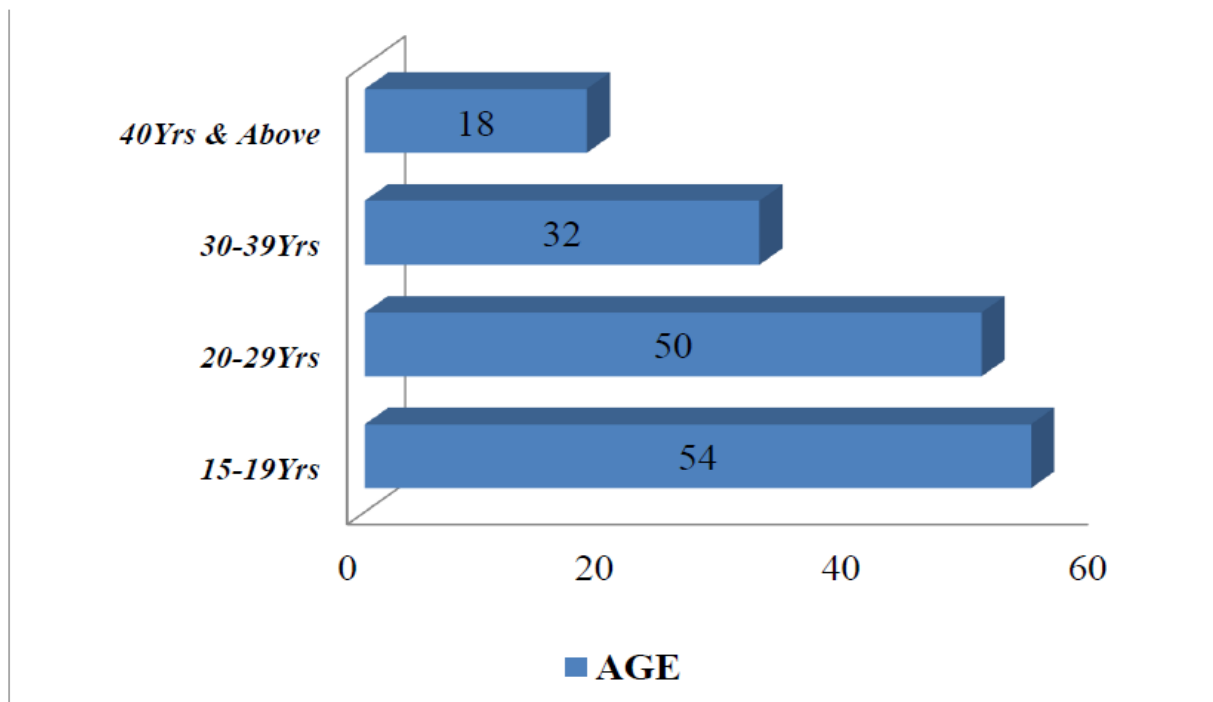
DATA ANALYSIS AND INTERPRETATION

Figure 1. Age bracket of participants that responded to the questionnaire
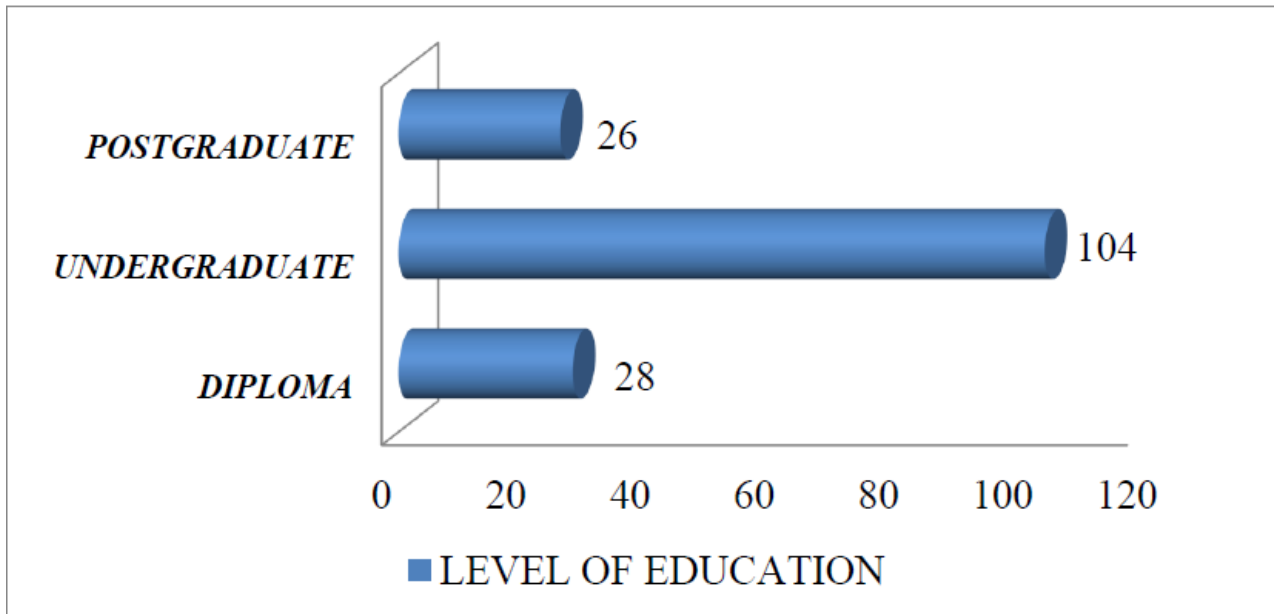
Figure 2. Level of Education of respondents

Marital Status	Frequency	Percentage (%)
Single	97	63.0
Married	57	37.0
Total	154	100

Figure 3. Marital Status of Respondents

Institution Selected	Frequency	Percentage (%)
LASU	41	26.6
NOUN	19	12.4
NTI	38	24.7
UNIBADAN	35	22.7
OAU	21	13.6
Total	154	100

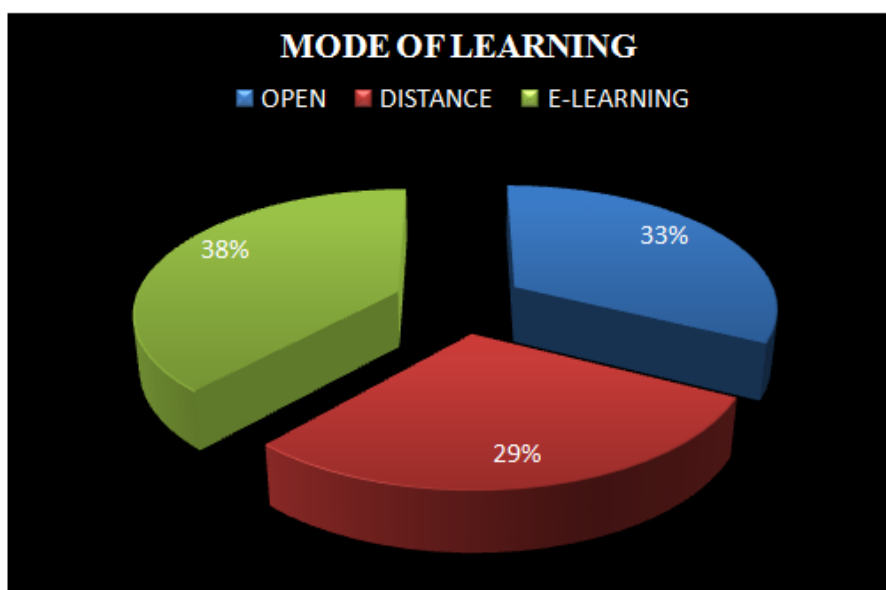**Figure 4.** Institutions of Learning of Participants

Figure 4. Respondents Mode of Learning

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RESULTS

The result of the study was expatiated in detail based on the questions provided for participants to answer. The aim of the study was to investigate the impact of Covid-19 pandemic on open, distance and e-learning in selected Nigerian Universities. Data from the questionnaires provided via Google link were coded and analyzed using version 20 of SSPS software. During the study, about 154 responses were gotten from students of the 5 selected Universities used as cases of study i.e. Lagos State University, Ojo, National Teachers' Institute, Kaduna, University of Ibadan, National Open University and Obafemi Awolowo University, Ile-Ife. Hence, the results were presented on both figures and tables.

Figure 1: Age Distribution of Participants

It illustrates that the total number of respondents were 154. The study sought to determine the age bracket of the respondents, 35% of the respondents were between the range of 15-19 years, 32.4 % were respondents between the ages of 20-29 years, 20.7% of the respondents were between age 30-39years, while 11.6% of the respondents swere 40 years and above.

Figure 2: Level of Education of respondents

This aspect reveal that 26 of the respondents that represents 16.8% were diploma students, 104 of the respondents that represents 67.5% were undergraduate students while 28 of the respondents representing 18%

were postgraduate students. This shows that most of the respondents were undergraduate students.

Figure 3: Marital Status of the Respondents

It reveals that 97 of the respondents that represent 63.0% were single while 57 of the respondents representing 33.0% are married. This shows that most of the respondents are single.

Figure 4: School of Learning of Participants

This figure show that 41 of the respondents representing 26.6% were Lagos State University students, 19 of the respondents representing 12.4% were students of National Open University of Nigeria, 38 respondents representing 24.6% were National Teachers' Institute students, 35 of the respondents representing 22.7% were students of University of Ibadan, while 21 of the respondents representing 13.6% were students of Obafemi Awolowo University, Ile-Ife.

Figure 5: Mode of Learning of the Respondents

This figure reveal that 50 of the respondents that represents 32.4% studies via open learning, 45 of the respondents representing 29.2% studies through distance learning while 59 of the respondents representing 38.3% receives lectures via e-learning. This translates that most of the respondents learn through e-learning.

Research Question 1: To what extent have Covid-19 affected open, distance and e-learning in Nigerian Universities

Table 1: The extent at which Covid-19 pandemic has affected open, distance and e-learning in Nigerian Universities

S/N	QUESTIONS	A	SA	D	SD	Total
1.	Covid-19 pandemic has improved my competence and skills in e-learning	72	35	16	34	**154**
		46.7	22.7	10.3	22	**100%**
2.	Covid-19 pandemic provided students with the opportunity of being assessed and submit assignment online	87	29	22	16	**154**
		56.4	18.8	14.2	10.3	**100%**
3.	Covid-19 pandemic has created ever growing gap among students	81	49	12	12	**154**
		52.5	31.8	7.7	7.7	**100%**
4.	Covid-19 pandemic has been helpful to distance/learning learning	84	20	36	14	**154**
		54.5	12.9	23.3	9.0	**100%**
5.	Students are very much satisfied with the mode of learning during Covid-19 pandemic	26	17	66	45	**154**
		16.8	11	42.8	29.2	**100%**
6.	Open, distance and e-learning are avenues used by students and lecturers to learn and teach during Covid-19 pandemic	78	27	27	22	**154**
		50.6	17.5	17.5	14.2	**100%**

Item 1 of table 1 show that 46.7% of the respondents agreed to the first item, 22.7% strongly agreed, 10.3% disagreed while 22% strongly disagreed. It shows that most of the respondents agreed with the statement. Randomly, most of the participants agreed to all the statements in table 1 of the research questions.

Research Question 2: What are the Impacts of Covid-19 pandemic on open, distance and e-learning in Nigerian Universities?

Table 2: Impacts of Covid-19 pandemic on open, distance and e-learning in Nigerian Universities

S/N	QUESTIONS	SA	A	SD	D	Total
7.	Students with limited knowledge of internet has been affected during Covid-19 pandemic	54	80	10	10	**154**
		35	51.9	6.4	6.4	**100%**
8.	The frequency of students using open, distance and e-learning during Covid-19 pandemic is very high	57	25	48	24	**154**
		37	16.2	31.1	16	**100%**
9.	Covid-19 pandemic has affected proper monitoring of students' behaviour and social interaction in class.	57	63	22	12	**154**
		37	40.9	31.1	7.7	**100%**
10.	Covid-19 pandemic has influenced Nigerian Universities to use webinar means to pass knowledge to students.	124	9	15	6	**154**
		80.5	5.8	9.7	3.8	**100%**
11.	Covid-19 pandemic has affected explicit face-to-face instructions from lecturers.	51	72	23	8	**154**
		33.1	46.7	14.9	5.1	**100%**
12.	Covid-19 pandemic has made distance/e-learning emerging and evolving in Nigerian Universities.	75	45	20	14	**154**
		48.7	29.2	13	9.0	**100%**

According to the finding in Table 2, most of the respondents strongly agreed to all the statements itemized above. This shows that Covid-19 pandemic has both negative and positive impacts on open, distance and e-learning in Nigerian Universities.

Research Question 3: What are the measures to be put in place to improve open, distance and e-learning learning after Covid-19 pandemic

Table 3: Measures to Be Put In Place to Improve Open, Distance and E-Learning Learning after Covid-19 Pandemic

S/N	QUESTIONS	SA	A	SD	D	Total
13.	Nigerian Universities should introduce edutech to improve learning process after Covid-19	64	51	18	21	**154**
		41.5	33.1	11.6	13.6	**100%**
14.	Nigerian Universities should design a distance education programme based on webinars.	81	48	18	7	**154**
		52.5	31.1	11.6	4.5	**100%**
15.	Nigerian Universities should make sure all students and lecturers are UCT compliance.	45	72	22	15	**154**
		29.2	46.8	14.9	5.1	**100%**
16.	Online source should be created to submit assignment and as well conduct examinations.	66	51	24	13	**154**
		42.9	33.1	15.6	8.4	**100%**
17.	Nigerian Universities should put in measures to guard against cheating while using online mode of learning and examination.	74	34	16	20	**154**
		48.1	22.1	10.3	12.9	**100%**
18.	Nigerian Universities should provide an avenue where absentees from class can read independently.	86	54	10	4	**154**
		55.8	35.1	6.5	2.6	**100%**

Table 3 above reveal that most respondents are strongly agreed to the fact that Nigerian Universities need to establish standing measures to improve open, distance and e-learning after Covid 19 pandemic.

DISCUSSION OF FINDINGS

Open learning which has been the widely used mode of learning in most Nigerian Universities is primarily affected by Covid-19 pandemic. Students and lecturers do not have the opportunity to interact face-to-face anymore and in this regard according to our findings seriousness while in the classroom, explicit instructions from lectures, proper monitoring of students' behaviour as well as social interactions between students are being threatened.

Our findings from the study reveal that distance learning has also been helpful in transferring knowledge to students before and during pandemic. It is pertinent to note from the findings that it also created negative experience in point of the fact that digital technology designed for it could not provide a space for conducting exams. It should however be noted some Nigerian Universities like Lagos State University, Ojo (LASU) has made unprecedented progress so far among other government owned educational institutions by providing a distance learning software known as Envivo into a full-blown e-learning platform.

E-learning has been an alternative medium for learning due to Covid-19 pandemic. The pandemic has both negative and positive impacts on e-learning and the negative impact of the pandemic on e-learning in Nigerian Universities from the findings of this study is that most of the students could not use the internet to learn in point of the fact that some of them are not ICT compliance while some do not have money to buy an

android phone, buy data on it no matter how infitesimal it is and power supply is another mirage denying them of access to the internet to receive lecture online. We found out from the present study that these challenges have caused major setbacks in educational advancement of the students during this period. This is in tandem to the view of Guragain (2016) who noted that face-to-face class learning contains more value and even rich in content development, distribution as well as maintenance cost. He argued that the face-to-face mode of learning is exclusively high in content as compared to e-learning.

However, the Covid-19 pandemic has also brought about positive impacts on students whereby using the internet as a means of learning has improved their competence and skills in handling or using the internet. Students during this period can submit their assignments also get assessed and do their exams via internet. The views of Arkorful and Abaido (2014) are used in weighing the authenticity of the respondents where they regarded students' training via e-learning as lesser in cost than the traditional eye-to-eye contact students' training. In other words, learning via e-learning in Nigerian Universities during Covid-19 pandemic has impacted both negatively and positively in the students and lecturers.

CONCLUSION

It is empirical enough through the findings of this study to maintain a standpoint that Covid-19 pandemic has disrupted the face-to-face educational service rendered in Nigerian Universities which is one of the negative impacts the pandemic has brought upon the country's educational system. The study also authenticated that the pandemic has indirectly restructured the mode of learning in selected Nigerian Universities positively whereby the sector transited into e-learning. Lecturers during this period transfer knowledge through this medium to students assess their assignments and even take attendance of students present at the virtual class.

Most of the students are beginning to become competence in both learning and skills via e-learning. While some of them are finding it difficult to adapt, others that could not afford to buy an android phone, data to assess the internet. It should however be noted that Covid-19 has greatly impacted negatively and positive on open, distance and e-learning during this period. Further studies may be directed towards adaptation to distance and e-learning after Covid-19 pandemic.

The study concludes that authorities in Nigerian Universities should look into improving educational system during and after the pandemic.

Recommendations

Having discussed the

➢ Nigerian Universities should an online learning technology that students will be able to afford.

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