



## LECTURERS READINESS FOR VIRTUAL TEACHING IN SOUTHWESTERN NIGERIAN UNIVERSITIES

**AJADI Olugbenga Timothy**

*Department of Educational Management  
Obafemi Awolowo University  
Ile-Ife, Nigeria*

**ADEBAKIN Azeez Babatunde**

*Department of Educational Management  
Obafemi Awolowo University  
Ile-Ife, Nigeria*

### ABSTRACT

The outbreak of COVID-19 pandemic has necessitated the use of non-physical modes for teaching by university lecturers. This, to a large extent, is a new normal in many universities particularly in south-western Nigeria. Therefore, this paper examined the readiness for virtual teaching in universities in the south-western part of the country. This study employed quantitative survey approach with academic staff members of the six federal government owned universities in the region as the population. The sample comprised 100 respondents each from three selected universities given a total of 300 respondents for this study. The selection of both the respondents and universities was done using the random sampling technique to allow for equal chance of selection. A Virtual Teaching in Nigerian Universities Questionnaire (VTNUQ) was designed and circulated electronically to respondents while percentages were computed to answer the research questions for the study. It was found that access to computer by lecturers was higher in terms of ownership of personal computer (home) while only a few have access to computers in the office. The study also found that lecturers' access to the internet is prominent in the office and universities' library while home access to internet is low. Furthermore, the study found that lecturers are mostly not exposed to virtual teaching, except a few of them. Consequently, it recommended that government through the university management should improve funding for universities to make adequate provisions for teaching gadgets and facilities that would aid virtual process of instructional delivery.

**KEYWORDS:** Lecturers Readiness, Virtual Teaching, Deadly Disease, New Normal and Non-Pharmaceutical Precautions.

---

\***CORRESPONDING AUTHOR:** AJADI Olugbenga Timothy, Department of Educational Management, Obafemi Awolowo University, Ile-Ife, Nigeria. Email: [ajagbesope@yahoo.co.uk](mailto:ajagbesope@yahoo.co.uk) Tel (+234) 7029890275



## INTRODUCTION

The world over, the largest disruptions in teaching and learning in the universities was in the year 2020 as a result of the outbreak of a deadly disease, COVID-19. The pandemic broke out in November, 2019 as reported by Shereen, Khan, Kazmi, Bashir, and Siddique (2020). United Nations (2020) informed that the pandemic has affected nearly 1.6 million students across the different levels of education in more than 190 countries worldwide. This has messed up the educational system globally most especially the Nigerian public university and no sense was made out of the situation to ensure functionality of the system. This is because conventional face-to-face method of teaching is gradually going down the drain as method of instructional delivery in the university due to the new normal way of teaching occasioned by the widespread of COVID-19. The outburst has negatively affected the world in all spheres from economy to health, information technology, professional development as well as teaching and learning in all educational institutions. This disruption challenged the Nigerian universities to adopt technology as alternative modes of instructional delivery in support of teaching and learning. The modes include but not limited to the use of email, WhatsApp, radio, zoom, television to support teaching and learning.

Many African countries, particularly Nigeria, did not take the spread of this pandemic seriously until the first case was reported in February, 2020. As at 24<sup>th</sup> October 2021, 210,460 cases have been confirmed, 202,379 cases have been discharged and 2,882 deaths have been recorded in 36 states and the Federal Capital Territory. Moreover, 165 new confirmed cases were recorded in Nigeria on the 24<sup>th</sup> October, 2021 (NCDC, 2021).

**Table 1: Confirmed COVID-19 Cases by State as at 24<sup>th</sup> October, 2021**

States Affected	No. of Cases (Lab Confirmed)	No. of Cases (On admission)	No. Discharged	No. of Deaths
Lagos	77,676	11	76,916	749
FCT	23,117	1,999	20,901	217
Rivers	12,607	110	12,343	154
Kaduna	10,009	110	9,821	78
Plateau	9,674	206	9,400	68
Oyo	8,742	44	8,507	191
Edo	6,568	176	6,168	224
Ogun	5,371	01	5,290	80
Ondo	4,545	87	4,360	98
Akwa Ibom	4,348	228	4,076	44
Kano	4,329	76	4,137	116
Kwara	3,930	217	3,650	63
Delta	3,588	922	2,556	110
Osun	2,985	43	2,856	86
Enugu	2,726	108	2,589	29
Gombe	2,566	08	2,501	57
Nasarawa	2,478	94	2,345	39
Anambra	2,369	17	2,333	19
Katsina	2,226	06	2,185	35
Ebonyi	2,059	24	2,003	32
Imo	2,036	107	1,888	41
Abia	2,013	33	1,950	30
Benue	1,785	305	1,455	25
Ekiti	1,762	30	1,704	28
Bauchi	1,677	48	1,611	18
Borno	1,356	04	1,314	38
Bayelsa	1,232	16	1,188	28
Taraba	1,201	57	1,116	28
Adamawa	1,157	27	1,098	32
Niger	1,057	39	998	20
Sokoto	806	06	772	28
Cross River	625	11	589	25
Jigawa	598	16	565	17
Yobe	502	03	490	09
Zamfara	277	01	268	08
Kebbi	458	09	433	16
Kogi	05	00	03	02

**Source:** <http://covid19.ncdc.gov.ng/>



These statistics confirmed why Marbot (2020) reported that Nigeria has been identified by WHO as one of the high-risk African countries for rapid spread of COVID-19 due to poor standard of the healthcare system. However, in a bid to contain the spread of the virus, the Federal Ministry of Education announced a temporary closure of all schools in Nigeria, effective from March 23<sup>rd</sup>, 2020. It must be emphasised that educational institutions cannot be shut down forever. As a result, universities were directed to re-open with instructions that teaching be delivered virtually to avoid physical contact with the student. The present situation in the universities necessitates that the universities need to prepare for teaching using other mode apart from the conventional face-to-face method. This situation is referred to as “new normal”. This phrase was first used in business during economic recession to warn economists that industrial economies would come back to normal after the recession (El-Erian, 2010). Since then, the term has become a household name used differently by different discipline.

## REVIEW OF RELATED LITERATURE

The present situation of teaching and learning in Nigeria universities is an indication that our traditional learning method in the university demands a radical transformation to sustain learning to have a better world. In credence to this, Dolence and Norris (1995) assert that effect of changing from the industrial age to the information age is that all the systems including higher education will also change because there will be a change in both what people need to learn and how they can and should learn it. The industrial age in the university is gradually becoming unpopular with the outburst of COVID-19 because during industrial age, learners gathered together for learning in a particular time and place whereas the new normal way of teaching and learning in the universities, as a result of the COVID-19, emphasises physical distancing as one of the non-pharmaceutical method of reducing the spread. People are to maintain two metres away from one another in any gathering which seems impossible if students are allowed to learn under industrial age. However, the need to embrace technology for teaching and learning in universities is eminent where there will be no need to deliver lecture by bringing people under the same roof. This will support the non-pharmaceutical method of dealing with the pandemic and assist universities in performing the duty of expanding frontier of knowledge.

Many experienced lecturers in the universities in Nigeria were amazed during their first time of using technological aided mode of teaching. This might be because they were not trained or exposed to other teaching modes. This buttress the position of Bonk and Dennen (2003), who stated that the same curriculum, course design and pedagogical practice used in face-to-face cannot be dogmatically adopted in virtual teaching mode. Lecturers need to familiarize with varieties of approaches and techniques to use virtual mode effectively because what worked perfectly in a conventional mode will not in a virtual environment. In virtual mode, the importance of presence cannot be underestimated. According to Anderson, Rourke, Garrison and Archer (2012) presence is the design, facilitation and direction of cognitive and social processes for effective outcomes.

Generally, virtual teaching is teaching outside the physical classroom. The fact that new normal in education industry does not support conventional way of teaching, the use of technology to teach the students in a virtual world make the use of virtual mode a necessity. This is the teaching mode used globally for knowledge transmission because of the outburst of COVID-19. This paves ways for the teacher to teach students in a virtual world irrespective of their location. They can also connect professional colleagues for collaboration without moving outside their office, town, city, province or country. So, virtual mode is becoming increasingly important as teachers become prepared to be accessible and be at the fore front of knowledge dissemination in a globalized society irrespective of the situation.



Virtual teaching is also referred to as e-learning or digital learning which has been given various definitions by different authors across the globe. Ajadi (2012) posits that it is teaching with the use of computers which has been in use at different levels of education over the years in the west. To Robinson (2021), it is a teaching with the use of a given technology platform irrespective of teachers' levels of expertise in using communication technology gadgets. This mode makes it inevitable to migrate students from face-to-face to a new learning environment that is technological driven.

According to Dincer (2018) *virtual teaching is defined as teaching that can functionally and effectively occur in the absence of traditional classroom environment. In a study which examined Google classroom users doubled as quarantines spread, De Vynck and Bergen (2020), considered a **blended teaching** as delivering of 30% to 80% of the course content to the recipient through information technology software while they considered a virtual teaching as having minimum of 80% of the course content delivered through information technology software. This implies that in a virtual teaching, most of the instruction is delivered with technological aided materials.* The mode arouses student's interest because various instructional aides are displayed with ease on the virtual platform. In addition, individual student reserves the right to choose when and where to learn and reduces the need for teachers and students to share a physical classroom.

According to Amin and Zimmerman (2020) virtual teaching is a mode that suddenly uprooted a teacher from giving in-person instruction and compulsorily positioned the teacher in a new teaching environment, completely driven by technology. It is supported by computers and/or the internet both outside and inside the four-wall of the classroom. It can also be referred to as an electronic-based teaching that solve students' problems. Virtual teaching, according to Bartley and Golek, (2004) and Evans and Haase, (2001), has been part of the American education system long ago, and in March 2020 Robinson (2021), reported that all teachers and students in schools across the United States had to make a sudden shift to virtual academic platforms. As a result, virtual teaching has become the largest teaching mode in the United States.

According to Vynck and Bergen (2020) in Robinson (2021), Google Classroom, one of the virtual teaching platforms has double the active users since March 2020, with approximately 100 million users worldwide to date. Google classroom, video conference application, and meet are being used 25 times more than it was in January of 2020, with a total of 120 million users, up from 90 million in 2019. This points to how virtual teaching is transforming the education sector and possibility of improving teacher's productivity as well as students' access and safety. The adoption of virtual teaching has been prevalent in all parts of the world, Bao (2020), Johnson, Veletsianos and Seaman (2020) concluded that this is more sustained and effective at the higher educational level.

Specifically, virtual teaching has increased geometrically since the outbreak of COVID-19 pandemic. This method addresses the non-pharmaceutical precautions of COVID-19 and reduces the risk associated with contacting the virus when students are gathered together for physical teaching in a particular time and place. Virtual teaching can be in form of computer-based, internet-based, remote teacher online, blended teaching and facilitated virtual teaching. Computer-based virtual teaching is when the software on the institution server provides instruction for the students which can be directed towards individual students' need.

The internet-based virtual teaching is when the software for instruction is housed on the website and remote server. The third form of virtual teaching is remote teacher online where teacher provided the instruction with internet through video-conferencing, online forums, zoom, email and instant messaging but not physically present. The blended virtual teaching



is a platform that combines conventional means of teaching with computer and internet-based. In effect, students receive information from two sources. One from the traditional classroom teacher, and the other from any of the virtual methods. The facilitated virtual teaching on its own is computer-based, Internet-based or remote teacher online instruction that is supported by facilitator. The facilitator does not teach or direct student's activities in the class but only guide and coordinate their activities. The facilitator may or may not be with the students physically or virtually.

The roles and requirements of teachers using virtual method cannot be easily identified because it is a different teaching platform from the conventional method. According to Technopedia (2021), some teachers did not realize that lectures are given only through learning management systems, video-conferencing, or other internet communications platforms. As a result, teachers need to shift from the traditional face-to-face mode to flexible virtual mode of teaching. There is also a need to explain the benefit of virtual teaching to teacher's professional growth and development. Apart from the school and students, virtual teaching is of immense benefit to teachers. It opens doors of opportunity for teacher's growth and development without risk of travelling outside one's jurisdiction. It has broad application by extending what happens in the school beyond the school.

In a study by Banky, Ferguson and Collins (2017), a number of university lecturers were interviewed regarding their virtual and face-to-face teaching experiences. The respondents highlighted the educational opportunities and benefits of the virtual over traditional environment to students and lecturers. Lecturers informed that in a virtual mode, integrating learning experiences and resources are done with ease. The platform can also host expert from another location while students have access to the lecturer and the expert. It is worthy to note that students at the receiving end are responsible for their own learning. Allen and Gar (2018) informed that the challenges of virtual teaching can be identified by the lecturer before the class and discussed at the introductory stage of the lecture. The ability of the teacher to use virtual mode to teach is an added advantage to teacher's learning experience, but students require specific skills to filter useful and factual information from that which is less than reliable. In addition, while threaded discussions may lead to deeper level thinking, the reliance on written submissions may not appeal to all students. Anonymity in a blended or online course is often identified as an advantage which ensures equality among students, and between the students and the instructor, but it can also lead to misunderstandings which should be addressed by the instructor in a timely manner.

Chan, Ranjit, Jamiah and Eliza (2007) in their study found that using technological-aided mode of teaching in educational institutions cannot be possible without lecturers' access to computer which can be provided by individuals where the institution cannot provide due to paucity of resources or provided by the institution where such institution has what it takes to provide computers for the lecturers on the institution pay roll. However, Baggaley (2006) concluded that management of institution of higher learning in developing countries are not paying the needed attention to the procurement of computer and facilities to enhance electronic teaching. In addition, Varvel (2007) concluded that the readiness of institutional staff to deploy computer-aided facilities in their various institutions will be a mirage if the institutional support and facilities are not commensurate with the level of staff preparation

In Nigeria, Fakinlede, Yusuf, Adegbiya and Oputa (2014) found that inadequate facilities and infrastructure deficit in Nigerian higher educational institutions are part of the challenges why it is inevitably impossible to stand among the committee e-learning higher institutions worldwide. Their study also established the fact that lecturer's expresses their readiness to use other instructional teaching mode provided there is institutional support for the deployment of what it takes to use such mode. On the perception of staff on the ability to use unconventional instructional method to deliver instruction in a



conventional institution, Martin, Budhraani and Way (2019) found that the perception of lecturers who have been exposed to electronic instructional facilities for more than five years in the institution are higher than others with less experience.

Even though there are positive findings for using virtual teaching, it is still not clear that this can be generalized. A team of researchers at Stanford Research Institute International conducted a systematic search of the literature from 1996 to 2008 and identified more than a thousand empirical studies of virtual teaching (Means, Toyama, Murphy, Bakia & Jones 2010). In the meta-analysis which used stringent criteria for selecting studies that utilized a rigorous research design, compared virtual teaching with the conventional format, quantitatively measured student performance, and obtained enough information to calculate an effect size, the researchers analyzed 45 studies and on average, they found that students in a virtual class performed modestly better than those in the conventional face-to-face class. The difference in student performance was larger in the studies where virtual elements were blended with face-to-face instruction, and these blended conditions often included additional learning time and instructional elements not received by students in the control conditions. The variations in how virtual method was used did not influence student performance significantly, but it should be noted that there is a small number of studies for this particular result (N=13). The researchers concluded that the combination of time, curriculum, and pedagogy in the virtual class produced the observed difference in student performance, but there was no evidence that virtual method is superior as a mode for teaching, which is consistent with previous literature. The researchers concluded that there were few rigorous K-12 researches hence; their results cannot be generalized to K-12 settings.

The sudden transformation to virtual teaching compelled teachers to make some reflections and immediately implement changes to fully integrate technology into their teaching. The option was no longer there for any lecturer to wait for a new comfort level or supports. In a study conducted by Hutchison and Reinking's (2017) on teachers' perceptions of integrating information and communication technology into teaching. The researchers attempted to reveal the perception of the role and benefit of using technology to teach. Adebola (2018) conducted a similar study including lecturers in the university who were classified as being on the "cutting edge" of integrating technology into their teaching. The results revealed that lecturers did not have a wide scope of knowledge of the technology, and they did not have much exposure to computer assisted teaching. Adams and Stolle (2018) conducted a similar study with 46 high school teachers who were experts across different teaching modes. Their focus group interviews brought them to the conclusion that teachers did not integrate technology in their practice because of the lack of knowledge of how to use it, and apprehensions about having access to the technology.

The United States Department of Education (2017) informs that the success of virtual teaching is determined by several factors among which are: teacher training, teacher access to computer and technology facilities, attitude towards the use of technology, administrator support, teacher's perception, resources, and planning. Teacher's creativity and innovation encourages them to present real life situation to the students virtually. One reason why there is so much discussion around virtual teaching is the level of exposure of teachers to the mode. According to Durff and Carter (2019), the level of exposure of teachers in technological aided teaching mode differs. Some are highly exposed; some are moderately exposed while some are not exposed. Those highly exposed had training directly on the use of the various virtual teaching platforms and are certificated. These are institutionally or individually sponsored teacher who did training on virtual teaching in a specialized institution. Those who are moderately exposed according to Durff and Carter are teachers trained by institutional and or individually sponsors trainers who are certificated. These categories are trained by certificated trainers. Those who



are not exposed are those who did not have any formal training on the use of virtual teaching but learn the act through self-efforts. Pitman and Gaines (2015) conducted a study on influence of educators' exposure to technology on online teaching and concluded that teachers who are highly exposed outperformed their counterpart who are less exposed to the available technology.

From a more systematic analysis on the part of teachers who did not attend formal training in virtual teaching but learnt the skills with self-efforts, Navarro and Shoemaker (2000) found that their performance in virtual teaching were as good as or better than those that attended professional institution and those trained by trainers regardless of previous background and that teacher who did not attend formal training in virtual teaching expressed satisfaction with virtual teaching. Rovai and Jordan (2004) investigated the sense of community between those who attends professional training and self-trained teachers in virtual teaching. They found that those who attend professional training in virtual teaching had a stronger sense of community than those who are self-trained. There are other studies that found positive statistically significant influence of teachers using the virtual or blended format compared to the conventional method. Some of the positive outcomes are improved teaching as measured by use of related graphics and instructional aids, teacher interaction with course materials, improved perception of teaching and of the virtual format, stronger sense of community among teachers, and reduction in teacher's absence from the class.

It is expected that virtual teaching will be able to offer a world class education to students, irrespective of their location as long as they have access to the internet. A number of websites and companies are built on this premise, and many renowned experts and employers of labour have expectations for virtual teaching, particularly for massive open virtual courses (Selingo, 2013 in Dai, Daxing & Xia 2020; Bowen, 2013; Fisher, 2012; Koller & Ng, 2012; Lewin, 2012). Central to this benefit, is the effectiveness of the virtual teaching in teaching students anywhere and anytime. If virtual teaching is generally less effective than the conventional face-to-face format, then, some of the aforementioned purported claims and benefits of virtual teaching are highly suspected. This paper is therefore concerned about of readiness of lecturers for virtual teaching in southwestern Nigerian universities.

## QUESTIONS

To guide this study, the following research questions were answered.

1. Where do the lecturers have access to computer?
2. Where do the teachers have access to internet?
3. How did lecturers acquire virtual teaching skills?
4. How exposed are Nigerian universities to virtual teaching?

## METHODOLOGY

This study adopted the quantitative design using survey approach. The study population comprised all academic staff members of the six federal government owned universities in southwest, Nigeria. These are University of Lagos, Lagos, Federal University of Agriculture, Abeokuta, University of Ibadan, Ibadan, Obafemi Awolowo University, Ile-Ife, Federal University of Technology, Akure and Federal University Oye, Oye-Ekiti. Three first generation universities are selected from the six in the zone. These are University of Ibadan, Ibadan, University of Lagos, Lagos and Obafemi Awolowo University, Ile-Ife. The sample comprised 100 randomly selected respondents each from three selected universities in southwestern





Nigeria. This gives a total of 300 respondents for this study. The selection of both the respondents and universities was done using the random sampling technique. This was to allow for equal chance of being selected.

A self-designed questionnaire tagged Virtual Teaching in Nigerian Universities Questionnaire (VTNUQ) was used to elicit information from the respondents. Face and content validity of the instrument was checked by colleagues who are experts each form Educational Technology, Distance Learning and test and measurement. The questionnaire initially had 15 items in three categories but was narrowed down to two categories. The number of items increased to 20 based on recommendations from content experts about items they felt was missing. Checking the internal consistencies of VTNUQ, test re-test reliability co-efficient of 0.76, considered reliable enough, was obtained with the use of Pearson Product Moment Correlation. Furthermore, google form was designed to make the instrument an online survey of circulation, administration, collection and collation. However, out of the 300 expected responses, the researchers were only able to retrieve 280 given 93.3% response rate. This rate was considered normal and very high for online survey (Fan & Yan, 2010; Manfreda, Bosnjak, Berzelak, Haas, & Vehovar, 2008). Percentages were computed to answer the research questions raised for the study.

## RESULTS

### Research Question 1: Where do lecturers have access to computer?

As suddenly required to conduct virtual teaching, it is important to take stock of lecturers' access to require device, that is computer, and where they have access. This research question therefore sought to provide information on lecturers' access to computer for online teaching. This was captured by: access at home, access on campus, access in the cyber café and access in the school computer laboratory. The answer is as provided in Table 2.

Table 2: Lecturers access to computer

S/N	Frequency	Percentage (%)
Home	260	92.9
Office	20	7.1
Cyber Café	-	-
School Computer Laboratory	-	-
<b>Total</b>	<b>280</b>	<b>100</b>

Majority (92.9%) of the lecturers have access to computers in their homes while 7.1% have access at office. No lecturers accessed computers at cyber café or the school computer laboratory.

### Research Question 2: Where do lecturers have access to internet?

Virtual teaching, as it were, requires facilities such as the internet. Hence, it is necessary to assess lecturers' access to such facility and where they have access it. This research question therefore sought to provide information on lecturers' access to the internet for online teaching. This was captured by: access at home, access on campus, access in the cyber café, access in the school computer laboratory and access in the school library. The answer is as provided in Table 3.



**Table 3:** *Places where lecturers have access to internet*

S/N	Frequency	Percentage (%)
Home	10	3.6
Office	260	92.8
Cyber Café	-	-
School Computer Laboratory	-	-
School Library	10	3.6
<b>Total</b>	<b>280</b>	<b>100</b>

As evident in Table 3, access to internet facilities by lecturers was found to be in their respective homes (3.6%), on the campus (92.8%) and in the school library (3.6%).

**Research Question 3:** How did lecturers acquire virtual teaching skills?

To answer this research question, respondents provided information on how they acquired virtual teaching skill for online teaching. This was captured by: professional training and self-efforts of the lecturers. The answer is as provided in Table 4.

**Table 4:** *Lecturers means of virtual teaching skills acquisition*

Response	Frequency	Percentage (%)
Professional trained	62	22.15
Self-efforts	218	77.85
<b>Total</b>	<b>280</b>	<b>100</b>

Table 4 showed that majority of the sampled lecturers reported self-effort (77.85%) as the means through which they acquired virtual teaching skills. However, a few privileged lecturers (22.15%) were able to attend one form of training or the other that facilitated their skills acquisition in virtual teaching.

**Research Question 4:** How exposed are Nigerian universities lecturers to virtual teaching?

To answer this research question, respondents provided information on how their perceived level of exposure to virtual teaching in the sampled universities. The level of exposure was captured by: high, low and none. The answer is as provided in Table 5.

**Table 5:** *Level of exposure of Lecturers to virtual teaching*

Level of Exposure	Frequency	Percentage (%)
High	50	17.85
Low	120	42.86
None	110	39.29
<b>Total</b>	<b>280</b>	<b>100</b>



Table 5 showed lecturers exposure to virtual teaching in the study area. A few respondents had high (17.85%) exposure to virtual teaching; majority had low (42.86%) exposure while others (39.29) had no exposure at all to virtual teaching.

## DISCUSSION

The research finding on access to computer by lecturers shows that computer access was generally higher in terms of ownership of personal computer (home). However, official computers provided by sample universities were not adequately accessible in the office. This implies that many lecturers use their personal computers to deliver statutory assignments such as teaching, where applicable. This finding supports why Chan, Ranjit, Jamiah and Eliza (2007) concluded that e-teaching allows the use of personal or institutional computer-enhanced teaching mode. However, the finding is in line with the view that educational institutions are not paying adequate attention to the problems of inaccessibility to facility such as computers for teaching and learning (Baggaley, 2008). This exacerbates the challenges of facilities and infrastructural deficit facing higher education in Nigeria (Fakinlede, Yusuf, Adegbija & Oputa, 2014). This study further found that lecturers' access to the internet is pronounced in the office and universities' library because most institutions make provision for the internet facility and access. Meanwhile, private provision of the internet at home and sometimes on the smart phone is generally low.

In addition, this study found that self-efforts of the lecturers gave them the ability to use the resources and technological applications required for virtual teaching. This is because many considered themselves proficient enough in the use of computer applications and facilities such as word processing, spreadsheets, use of internet browsers and Wikipedia for teaching and learning. However, there are few who also acquired professional training in virtual teaching. This shows that many of them are ready for virtual teaching exercise which also confirms the self-rated evidence of Fakinlede, Yusuf, Adegbija and Oputa (2014) that lecturers may have the needed ICT skills for online learning. Varvel (2007) also submitted that with the dynamism in online technologies, readiness to teach online may be in a state of flux. Navarro and Shoemaker (2000) found that performance of self-assisted teachers in virtual teaching were as good as or better than those that attended professional institution and those trained by trainers regardless of previous background and that teacher who did not attend formal training in virtual teaching expressed satisfaction with virtual teaching. This is also in contrary to the finding of Rovai and Jordan (2004) that those who attend professional training in virtual teaching had a stronger sense of community than those who are self-trained. Lastly, it was found that lecturers are mostly not exposed to virtual teaching but only for a few of them. This may pose some difficulty in accepting what Cahapay (2020) described as 'new-normal' in teaching. In line with the finding, Martin, Budhrani and Wang (2019) show that faculty with little or no online teaching experience have lower perceptions of their ability in online teaching than those with more than five years' experience. Most faculties have no formal education training, relying primarily on their experience as a student and face-to-face instructor.

## CONCLUSION

Results of this study show that there are many factors influencing lecturers' readiness for virtual teaching. Such factors as reviewed in this study include access to facilities, technology and training. Understanding these factors and having strategic implementation plans will help universities lecturers to succeed in full adoption virtual learning.



## RECOMMENDATIONS

Consequent upon the finding of the study, it was recommended that government through the university management should improve on revitalizing universities by making adequate provisions for teaching gadgets such as personal computers (Laptops) and internet facilities for lecturers to aid virtual process of instructional delivery. Furthermore, university managements are encouraged to design appropriate IT training courses for lecturers to boost their IT skills. The training courses could be about online teaching pedagogy and methodology, technical skills, or seminars presenting online teaching experiences. The training will give them better exposure to various virtual teaching platforms and encourage them to acquire relevant virtual teaching skills.

## REFERENCES

- Adams, C. & Stolle, M. (2018). Teaching phenomenological research and writing. *Qualitative Health Research*, 27(6), 780-791.
- Adebola, A. O. (2018). Getting the most from online teaching in Nigeria Universities. *Journal of Educational Strategies, Issues and Ideas*, 91(3), 105-121.
- Ajadi, O. T (2012). Five instructional delivery modes and students' academic performance of distance learners in southwestern universities (Unpublished Ph.D Thesis), submitted to the Faculty of Education, University of Ibadan, Nigeria
- Allen, I. E., & Gar, J. (2018). **Five Step Model of Online Learning: Retrieved from <http://www.allengar.com/five-stage-model.html> on the 5<sup>th</sup> July, 2021**
- Amin, R. & Zimmerman, A. (2020). With NYC schools closed, many parents become reluctant homeschoolers. . Retrieved from <https://www.ewa.org/latest-news/new-york-city-schools-closed-many-parents-become-reluctant-homeschoolers> on the 5<sup>th</sup> July, 2021
- Anderson, T., Rourke, L., Garrison, D.R., & Archer, W. (2012). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, 16(2), 1-17.
- Baggaley, J. (2008). Editorial-standing by ponds. *The International Review of Research in Open and Distance Learning* 9(3), 1-3.
- Banky, M. E. & Ferguson, D. L. & Collins. M. A. (2017). Learning to use, useful for learning: A usability study of Google apps for education. *Journal of Usability Statistics*, 12(2), 120-137.
- Bao, K. P (2020). Whether the school self-developed e-learning platform is more conducive to learning during the COVID-19 pandemic? *Best Evidence in Chinese Education*, 5(2), 269-280.
- Bartley, S. J. & Golek, J. H. (2004). Evaluating the cost effectiveness of virtual and face-to-face instruction. *Educational Technology & Society*, 7(4), 167-175.
- Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L. & Huang, B. (2004). How does virtual teaching compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research*, 74(3), 379-439.
- Bonk, C. L. & Dennen, M. O (2013). *Distance education curriculum: Definition and glossary of terms*, 2nd ed. Greenwich, CO: Information Age Publishing.
- Bowen, W. G. & Ithaka, S. (2012). *Interactive learning online at public universities: Evidence from randomized trials*. Ithaka S+ R. Retrieved from <http://mitcet.mit.edu/wpcontent/uploads/2012/05/BowenReport-2012.pdf> on the 27<sup>th</sup> March,



2021

- Bowen, W. G. (2013). *Higher education in the digital age*. Princeton: University Press.
- Cahapay, M. B. (2020). Rethinking education in the new normal Post-COVID-19 Era: A curriculum studies perspective. *Aquademia*, 4(2), ep20018.
- Chan Y. F., Ranjit K.S., Jamiah, B. & Eliza, P. (2007). *Computer education for classroom teaching*. Malaysia: McGraw-Hill
- Clark, R. E. (1994). Media will never influence learning. *Educational Technology Research and Development*, 42(2), 21–29.
- Dai Q. O, Daxing, M. P & Xia, A. L (2020). Whether the school self-developed e-learning platform is more conducive to learning during the COVID-19 pandemic? *Best Evidence in Chinese Education*, 5(1):569-580. Retrieved from <http://apo.org.au/sites/default/files/docs/lthakasr> on 27<sup>th</sup> March, 2021
- De la Varre, C., Keane, J., & Irvin, M. J. (2011). Enhancing virtual teaching in small rural US schools: A Hybrid, learner-centred model. *Journal of Asynchronous Learning Networks*, 15(4), 35–46.
- De Vynck, G. & Bergen, M. (2020). Google Classroom users doubled as quarantines spread. Bloomberg. Retrieved from <https://www.bloomberg.com/news/articles/2020-04-09/google-widens-lead-in-education-market-as-students-rush-online> on the 7<sup>th</sup> July, 2021
- Denny, P. (2013). The effect of virtual teaching on student engagement. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. New York, NY, USA: ACM.
- Dinçer, S. (2018). Are pre-service teachers really literate enough to integrate technology in their classroom practice? Determining the technology literacy level of pre-service teachers. *Education and Information Technologies*, 23(6), 2699-2718.
- Dolence, A. & Noris, M. (1995). The concept of industrial revolution. What the literature says. *Regional Educational Laboratory Mid-Atlantic*. Retrieved from <http://eric.ed.gov/?id=ED544210> on the 27<sup>th</sup> March, 2021
- Durff, L., & Carter, M. (2019). Overcoming second-order barriers to technology integration in K–5 Schools. *Journal of Educational Research and Practice*, 9(1), 126 – 142.
- El-Erian, M. A. (2010). *Navigating the new normal in industrial countries*. Washington D.C.: International Monetary Fund.
- Evans, J. & Haase, I. (2001). Virtual business education in the twenty-first century: an analysis of potential target markets. *Internet Research*, 11(3), 246–260.
- Fakinlede, C. O., Yusuf, M.O., Adegbija, V. M. & Oputa, G. O. (2014). Online learning in higher education: Faculty readiness in Nigerian universities. *Malaysian Journal of Distance Education*, 16(2), 109–123.
- Fan, W., & Yan, Z. (2010). Factors affecting response rates of the web survey: A systematic review. *Computers in Human Behavior*, 26, 132–139.
- Fioriello, P. (2009). 14 Advantages of E-learning. Retrieved from <http://drpfconsults.com/14-advantages-of-e-learning/> on the 24<sup>th</sup> April, 2021
- Fisher, D. (2012, November 6). Warming Up to MOOC's. *The Chronicle of Higher Education Blogs: ProfHacker*.
- Golek, P. (2004). Urban high school teachers' technology integration. *Journal of Research in Rural Education*, 19(3), 15–28.
- Hutchison, A. & Reinking, D. (2017). A national survey of barriers to integrating information and communication technologies into literacy instruction. *Journal of Educational Computing Research*, 44(2), 167–179.
- Inter-Agency Network for Education during Emergencies - INEE (2020). *Education during the COVID-19 pandemic*. New York: INEE



- Johnson, K. M. Veletsianos & Seaman, K. M (2020). *The gamification of sustaining virtual learning: game-based methods and strategies for training and education*. John Wiley & Sons.
- Jung, I., & Rha, I. (2000). Effectiveness and cost-effectiveness of virtual teaching: A review of the literature. *Educational Technology*, 40(4), 57–60.
- Koller, C., & Ng, D. (2009). Teaching and learning principles of Microeconomics virtually: An empirical assessment. *The Journal of Economic Education*, 40(1), 3–25.
- Laaser, W., & Toloza, E. A. (2019). The changing role of the educational video in higher distance education. *The International Review of Research in Open and Distributed Learning*, 18(2), 74 – 90
- Lewin, L. (2012). Blended teaching & learning. *School Administrator*, 69(4), 16–21.
- Manfreda, K. L., Bosnjak, M., Berzelak, J., Haas, I., & Vehovar, V. (2008). Web surveys versus other survey modes. *International Journal of Market Research*, 50, 79–104.
- Marbot, T. A. (2020) Impacts of COVID-19 on the Ethiopian education system. *Science Insights Education Frontiers*, 6(1), 569-578.
- Martin, F., Budhrani, K., & Wang, C. (2019). Examining faculty perception of their readiness to teach online. *Online Learning*, 23(3), 97-119. doi:10.24059/olj.v23i3.1555.
- Means, B., Toyama, Y., Murphy, R., Bakia, M. & Jones, K. (2010). Evaluation of evidence-based practices in virtual teaching: A meta-analysis and review of virtual teaching studies. Monograph. Retrieved from <http://www.ed.gov/about/offices/list/opepd/ppss/reports.html> on the 25th April, 2021
- National Survey of Student Engagement (2007) *Experiences that matter: Enhancing student learning and success – Annual Report 2007*. Bloomington, IN: Center for Postsecondary Research
- Navarro, P. & Shoemaker, J. (2000). Performance and perceptions of distance learners in cyberspace. *American Journal of Distance Education*, 14(2), 15–35.
- Nigeria Centre for Disease Control (2021). *COVID-19 Nigeria*. Retrieved from: <https://covid19.ncdc.gov.ng/> on the 25th October, 2021
- Nur N. S, Fazyudi A. N, Kamarol B. & Mohamad R. (2014). A study on the teacher's perspective on the effectiveness of using e-teaching. *Procedia - Social and Behavioral Sciences* 123:139 – 144.
- Pittman, T., & Gaines, T. (2015). Technology integration in third, fourth and fifth grade classrooms in a Florida school district. *Educational Technology Research and Development*, 63, 539–554.
- Robinson, M. T. (2021). The virtual teaching experience with Google classroom during COVID-19: A phenomenological study. A Doctoral dissertation submitted to the School of Education, St. John's University, New York.
- Rovai, A. P. & Jordan, H. (2004). Blended Learning and Sense of Community: A Comparative Analysis with traditional and fully online graduate courses. *The International Review of Research in Open and Distance Learning*, 5(2), 57–74.
- Salmon, G. (2013). *Five-stage model of online learning*. Retrieved from <http://www.gillysalmon.com/five-stage-model.html> on the 29th April, 2021
- Sanz, I., Sáinz, J., & Capilla, A. (2020). Effects of the coronavirus crisis on education. Madrid: Organisation of Ibero-American States for Education, Science and Culture (OEI).
- Shereen, M. A., Khan, S., Kazmi, A, Bashir, N., & Siddique, R. (2020). COVID-19 infection: Origin, transmission, and characteristics of human coronaviruses. *Journal of Advanced Research*, 24, 91-98.



- Technopedia (2021). What Does Virtual Classroom Mean? Retrieved from <https://www.techopedia.com/definition/13914/virtual-classroom> on the 3rd July, 2021.
- United Nation (2020). *Policy brief: Education during COVID-19 and beyond*. United Nation
- United States Department of Education (2017). Transforming American education: Learning powered by technology. *National Educational Technology Plan 2010: Executive summary*. Washington, DC. Retrieved from <http://www.ed.gov/technology/netp-2017> on the 5th July, 2021
- Varvel, O. L. (2007). Suspending classes without stopping learning: *Multidisciplinary Journal of Education Research*, 10(1), 88 – 103.