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Research Paper

Perception of University Lecturers on the Effectiveness of Remote Learning Technique for Teaching Educational Courses during the COVID-19 Pandemic in the North Western Region of Nigeria

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Abstract

This Study investigated the Perception of University Lecturers on the Effectiveness of the Remote Learning Technique for Teaching Educational Courses during the COVID-19 pandemic in the Northwestern Region of Nigeria. The study was guided by three objectives, three research questions, and two null hypotheses. A descriptive survey research design was employed in the study. The population of the study was 977 lecturers. A simple random sampling technique was used to select the sample. From the population of 977, samples of 349 lecturers were selected for the study. The instrument used for data collection was adapted. Data collected was analyzed using descriptive statistics of mean and standard deviation to answer the research questions and the chi-square of inferential statistics was for testing Research hypotheses. The major findings of the study revealed that lecturers were aware of the Remote learning model but they were not utilizing the Remote learning model in teaching their courses during covid-19 pandemic. Similarly, the majority of the lecturers encountered different challenges in utilizing the Remote learning model for teaching where by lack of constant electricity supply is one of the major challenges. Moreover, the findings showed that there is no significant difference between lecturers' awareness and unawareness of remote learning.

Keywords *remote learning, teaching, and COVID-19 pandemic*

INTRODUCTION

We are now in a technological era that is rapidly developing and getting more scientific. As this change occurs, education in all forms and all subjects is not left out from this change. The introduction of Information and Communication Technology to instruction has directed to improving the advanced learning environment and the process of knowledge acquisition and dissemination at all levels of education. In some countries of the world, remote learning has been adopted. However, in the views of some researchers, remote learning has not been instituted in most of the university institutions in Nigeria. In situations where it is instituted, practices, available materials, and resources are the major problems, especially in public tertiary institutions in Nigeria (Usman, Mika'ilu & Nasiru, 2019). The low integration of remote learning systems in Nigerian Universities may not have been unconnected with some challenges and problems as the case may be.

Remote learning is a short-term mitigation option to act as a replacement for face-to-face teaching. It provides temporary access to instruction and instructional support. "Remote learning provides

an opportunity for students and teachers to remain connected and engaged with content while working from their homes. Opportunities for remote learning are typically linked to emergencies that pose a threat to student safety" (Muhammad et al., 2020).

Remote Learning is a temporary shift in instructional delivery due to crisis circumstances (Hodges et al., 2020). It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as a blended or hybrid study, and that will return to that format once a crisis or emergency has abated (Zubrick et al., 2005). The primary objective in these circumstances is to provide temporary access to instruction and instructional support in a manner that is quick to set up and is reliably available during an emergency or crisis.

Remote learning is, simply put, where the student and the educator are not physically present in a conventional classroom environment. Rather, instruction is disseminated through technological tools such as discussion boards, video conferencing, and virtual assessments (Hodges et al., 2020). It is an attempt to recreate the in-person, face-to-face classroom over the internet. Unlike its close relative, virtual learning, which is a more official, established mode of online learning, remote education involves lecturers and students who are not accustomed to education that takes place online. It is typically used during scheduling conflicts, illnesses, or, like today, disasters i.e. covid-19 pandemic (Muhammad et al., 2020, Ibrahim, & Shalizad, 2015). This particular newness of remote learning is what can make it tricky for both lecturers and students. Between private, public, big, and small institutions, remote learning looks fairly similar. While private institutions may feature more direct instruction through video conferencing platforms like Zoom and Skype than public institutions, all engage with remote learning similarly. Broadly put, remote learning is typically structured in this way: the teacher establishes a virtual connection with their students through an online class program. Here, the lecturer posts assignments, assigns reading, collects student work, provides feedback, and more. Students log in daily to the virtual home base for a scheduled amount of time and complete assignments, listen to lectures, or participate in activities. Having a virtual home base is vital to the success of distance learning. In addition to the instruction that takes place within remote classrooms like Google Classroom, many lecturers meet with their students and classes through video conferencing platforms like Zoom or Skype (Tian & Abdul 'Aziz, 2021). Some teachers give entire lectures through the service while some simply use it to check in on students and ensure they understand the material. The amount of time that Zoom, Skype, or any other direct virtual conferencing platform is utilized may differ among institutions, but it also serves as a significant tool in online learning. The lecturer will likely inform you of direct video-conferencing requirements.

Remote learning refers to educational activities that have a variety of formats and methods, most of which take place online (Graham et al., 2014).

According to the World Health Organization (WHO), coronaviruses are a family of viruses that cause illnesses ranging from the common cold to more severe diseases such as severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). These viruses were originally transmitted from animals to people. SARS, for instance, was transmitted from civet cats to humans while MERS moved to humans from a type of camel. The name coronavirus comes from the Latin word corona, meaning crown or halo. According to the WHO, signs of infection include fever, cough, and shortness of breath, and breathing difficulties. In more severe cases, it can lead to pneumonia, multiple organ failure, and even death. Most infected people show symptoms within five to six days. However, infected patients can also be asymptomatic, meaning they do not display any symptoms despite having the virus in their systems.

World Health Organization (WHO) on March 11, 2020, viewed COVID-19 as a pandemic and since then, the spread has deteriorated and more losses have occurred. The Federal Ministry of Education closed all tertiary institutions including universities, and secondary and primary schools nationwide over the outburst of the Coronavirus in Nigeria (World Bank, 2020). The Coronavirus which is popularly known as COVID-19 has interrupted the worldwide educational system as most nations around the world have caused the closure of all educational institutions in an attempt to hold the spread of the pandemic (Adeoye, & Adanikin, 2020). In light of the rising concerns about the spread of COVID-19 and calls to contain the coronavirus, a growing number of universities have shut down regarding face-to-face classes globally; the Coronavirus has revealed emerging weaknesses in education systems around the world.

Despite the beneficial role that Remote learning plays, there are some other challenges to using remote learning in teaching, such as Technology can be complicated and fickle; Remote learning can be distracting; it does not allow for those particular moments in class that make teaching such a wonderful and rewarding profession (Halili & Zainuddin, 2015). Another challenge is the limited access to videoconferences and content because of low bandwidth on the network. Furthermore, not all students and lecturers are aware that the utilization of remote learning is important in the teaching and learning processes. The pertinent question here is whether are University lecturers aware of and use Remote learning in the teaching and learning process. What are the challenges encountered in teaching using Remote Learning?

It is in line with the above that this study sought to investigate the Perception of University Lecturers on the Effectiveness of Remote Learning Techniques for Teaching Educational Courses during the COVID-19 pandemic in the North Western Region of Nigeria.

STATEMENT OF THE PROBLEM
It was agreed by different educationalists that ICT and its tools help a lot in the development of education in the world. In Nigeria, the internet has changed various sectors with no exception of education. Sokoto state government is one of the states in Nigeria that are always trying to boost education with the use of ICT for teaching and learning. In Sokoto State secondary schools, Bodinga local government area, there is a need to know whether or not the economics teachers in secondary schools are aware and ready for the use of Podcasting in teaching in the classroom. If economics teachers of secondary schools in Bodinga local government are not aware and ready to use Podcast in their teaching they will continue producing analog students who can't access materials through the internet and it will continue hindering the entire educational system in the State and Nigeria in general. This research will investigate the economics teachers' awareness and readiness towards the use of podcasts in teaching and learning in secondary schools in Bodinga's local government.

Objectives of the Study
The main objectives of the study were to:
1. Determine the level of University Lecturers' awareness of Remote Learning for teaching educational courses in the North-North-Western region of Nigeria during the COVID-19 pandemic.
2. Examine the extent to which University Lecturers utilize Remote Learning for teaching educational courses during the COVID-19 pandemic.
3. Find out the challenges of university Lecturers in using Remote Learning for teaching educational courses during the COVID-19 pandemic in North- Western Region of Nigeria.

Research Questions

The following Research Questions were used to guide the study:

1. What is the level of University Lecturers' awareness of Remote Learning for teaching educational courses in North Western Region Universities of Nigeria during covid-19 pandemic?
2. To what extent do University Lecturers utilize Remote Learning for teaching educational courses in North Western Region Universities of Nigeria during the COVID-19 pandemic?
3. What are the challenges of University Lecturers in using Remote Learning for teaching educational courses during covid-19 pandemic in North Western Region Universities of Nigeria?

Research Hypotheses

The following null hypotheses were used to guide the study:

1. There is no significant difference in the level of University lecturer awareness and unawareness of Remote Learning for teaching educational courses in North Western Region Universities of Nigeria.
2. There is no significant difference in the challenges of university Lecturers on using and non-using Remote Learning for teaching educational courses in North Western Region Universities of Nigeria during covid-19 pandemic.

LITERATURE REVIEW

In this chapter, literature relevant to the study was reviewed, specifically the chapter was presented under the following sub-headings: Teaching, information and communication Technology (ICT), Meaning/concepts of Remote learning, concepts of covid-19 pandemic, Review of similar studies and summary of the reviewed literature.

Summary of the Reviewed Literature

Research has shown that many countries have moved to a variety of formats and methods of teaching, most of which take place online as a result of covid-19 pandemic (Kusmaryono et al., 2021). The government had strict measures to curb the spread of the virus; these measures have led many institutions of learning including universities to choose Remote learning. Remote Learning is a temporary shift in instructional delivery due to crisis circumstances (Riah et al., 2020). The primary objective in these circumstances is to provide temporary access to instruction and instructional support in a manner that is quick to set up and is reliably available during an emergency or crisis.

Egede (2021) investigated the lecturers' perception of their competence to teach online during the COVID-19 lockdown. The result of the study revealed that lecturers acquired skills to teach online using the most familiar basic tools, but they needed technical assistance.

Halili and Zainuddin (2015) in their study revealed that colleges of education worldwide are moving more and more towards online learning and Remote learning. Moreover, Some studies have reported that the use of remote learning for teaching and learning activities has made learning activities easier, not all students can study independently.

John & Elijah (2021) carried out Research on the Methods of Investigating the Use of Remote learning in Higher Education: A Review of Recent Studies at the University of Nairobi. The study reviewed journal articles to examine the methods used in investigating the adoption of Remote learning in Higher Education. It was found that most studies were in the form of Action Research

which either took an interpretive or positivist approach with the choice being guided by the objectives of the study. The review also points out the need for orientation on the use of Remote learning at the initial stages of its implementation.

The study conducted by Ibrahim and Shalizad (2015), showed that ease of use, usefulness, and intention to use influenced the adoption of remote learning platforms, while perceived enjoyment was found not to influence the adoption of Remote learning.

Adeoye et al, (2020), revealed in their research that the educational sector globally is shifting towards remote learning to cushion the effect of this pandemic. However, developing countries evidenced by the Nigeria experience are posed with the challenge of shifting from the traditional teaching method to remote learning during the pandemic.

METHODOLOGY
Research Design
The research design adopted for the study is the Descriptive survey research design. It was considered appropriate for the study because it allowed the researchers to collect data from a sample of a defined population.

Population
The population of the study consisted of all the university lecturers in the faculties of education in eighteen (18) universities in the northwestern Region of Nigeria which consisted of 977 lectures.

Sample and Sampling Techniques
A simple random sampling technique was used to select six (6) universities among the 18 universities; in a simple random sampling technique, every member of the population has an equal chance of being selected as a sample to represent the Population.

From the population of 977 Lecturers, a sample size of 349 Lecturers was selected. The sample size was obtained using the online application of Raosoft software. The samples obtained tallies with Awotunde and Ugodulunwa (2004) who recommended 30% of the population to be the minimum sample in survey research. The table below shows the population and sample size of each university selected for the study.

Table 1. Name of institutions, population, and sample size

S/N	Universities	Population	Sample Size
1.	Ahmadu Bello University Zaria	112	87
2.	Bayaro University kano	93	76
3.	Kebbi state university of science and technology, Aliero	29	28
4.	Sule Lamido university kafin Hausa	54	48
5.	Umaru Musa Yar'aduwa university	38	35
6.	Usmanu Danfodiyo University Sokoto	92	75
	Total	**418**	**349**

Instrumentation
The lecturer structured Questionnaire (LSQ) served as an instrument for data collection. The Lecturers structured Questionnaire (LSQ) was adapted using 4 points Likert's scale rating i.e. strongly agreed (SA), Agreed (A) `Disagreed (D), and Strongly Disagreed (SD). The questionnaire consisted of three sections, i.e. sections A, B, and C. Section A is the introduction, Section B is the demographic information of the respondent and Section C deals with the lecturer's opinion. The

questionnaire was adapted from Muhammad et al., (2020) A survey Research on lecturers' Awareness and Utilisation of Blended learning in Colleges of Education in Sokoto State, Nigeria.

Validity of the Instrument
Copies of the instrument were subjected to the assessment of two experts; these experts examined the items of the instrument about suitability for both content and construct validity; the items were modified to seven (7) items from each variable to enhance the face and content validity.

Reliability of the Instrument
For the reliability of the instrument, 30 questionnaires were administered to some lecturers from the universities not participating in the study, and a reliability index of 0.75 was obtained.

FINDINGS AND DISCUSSION
Data Analysis.
The data collected was analyzed using simple descriptive statistics of mean and standard deviation to answer the foregoing research questions as follows:

Research Question One: What is the level of University Lecturers' awareness of Remote Learning for teaching educational courses in North Western Region Universities of Nigeria during covid-19 pandemic?

Table 2. Level of University Lecturers' awareness of remote learning

S/N	Items	SD	D	A	SA	Total	M	STD	DC
1	I'm aware of Remote learning	10	05	184	150	349	3.5	0.67	A
2	Remote learning has been introduced in my university curriculum.	15	05	169	160	349	3.4	0.72	A
3	My university gave me refresher training about remote learning	120	150	44	35	349	1.9	1.01	D
4	I have access to remote learning sites on the internet	15	20	166	148	349	3.2	0.76	A
5	All my students have competency enough to work with the internet during learning.	65	95	120	69	349	2.4	1.00	D
6	I have remote learning facilities at my university	57	47	143	102	349	2.8	1.03	A
7	I have access to remote learning facilities at my university	74	54	140	81	349	2.6	1.06	A
	Average Mean and Average STD						2.8	0.6	A

Disagree (D) = (1.5-2.49); Agree (A) = (2.50-4.00)

Table 2 shows that participants expressed positive responses on the majority of the items raised. This indicated the participants in this study were aware of the remote learning model as they agreed with most of the items seeking their responses. The average mean was 2.8 which was above the mean criterion of 2.5. This indicated that they agreed on the awareness of the remote learning model for teaching during covid-19 pandemic. The standard deviation was relatively high which implies that the respondents' responses revolved above the mean.

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Research Question Two: To what extent do University Lecturers utilize Remote Learning for

teaching educational courses in North Western Region Universities of Nigeria during the COVID-19 pandemic?

Table 3. Level of University Lecturers' utilization of remote learning

S/N	Items	SD	D	A	SA	Total	M	STD	DC
1	I present lectures via a remote learning model during covid-19	120	164	50	15	349	1.9	1.10	D
2	I use remote learning in some of my courses	73	55	140	81	349	2.7	1.05	A
3	I use remote learning in all my courses	140	168	29	12	349	1.7	0.75	D
4	Remote learning is more convenient than face to Face learning during covid-19	20	10	186	133	349	3.2	0.76	A
5	I use remote learning to engage students in learning from their homes	130	178	28	13	349	1.8	0.74	D
6	I use the remote learning model for student assessment	150	170	20	09	349	1.6	0.70	D
7	Remote learning model helps improve students learning during covid-19	66	49	132	102	349	2.8	1.07	A
	Average Mean and Average STD						2.2	0.9	D

Disagree (D) = (1.5-2.49); Agree (A) = (2.50-4.00)

Table 3 revealed that the majority of the respondents were not utilizing the Remote learning model for teaching during covid-19 pandemic as they disagreed with most of the items provided. The average mean was 2.2 which was below the mean criterion of 2.5, this indicated that they were not utilizing the Remote Learning Model for teaching during covid-19 pandemic. The standard deviation was also relatively low which implies that the respondents' responses revolved around the mean.

Research Question Three: What are the challenges of University Lecturers on Remote Learning for teaching educational courses during covid-19 pandemic in North Western Region Universities of Nigeria?

Table 4. Challenges of University Lecturers on Remote Learning

S/N	Items	SD	D	A	SA	TOTAL	M	STD	DC
1	There is a constant electricity to implement remote learning at my university	160	180	04	05	349	1.6	0.58	D
2	There is enough bandwidth of the internet in my university	66	94	122	67	349	2.5	1.01	A
3	I'm competent in working with the internet	110	150	48	41	349	2.1	0.10	D
4	Remote learning is not time-consuming	15	25	161	148	349	3.3	1.9	D
5	All my students can purchase a simple laptop or smartphone for learning	115	155	44	35	349	1.9	0.93	D
6	All my students have the skills to work with the internet	105	160	50	34	349	2.2	0.81	D
7	All my students are interested in online learning during covid-19	106	164	48	31	349	2.0	0.89	D
	Average Mean and Average STD						1.10	0.9	D

Disagree (D) = (1.5-2.49); Agree (A) = (2.50-4.00)

Table 4. The majority of the respondents in the study show that there were a lot of challenges to the Remote learning model for teaching during covid-19 pandemic as lecturers disagreed with most of the items in the responses. The average mean was 1.10 which was below the mean criterion of 2.5, this indicated that there were a lot of challenges with the Remote Learning Model for teaching. The standard deviation was relatively low which implies that the respondents' responses revolved around the mean.

Answering of Research Hypotheses
The data collected was analyzed using chi-square of inferential statistics to answer the foregoing research hypotheses as follows:

Hypothesis One: There is no significant difference in the level of University lecturer awareness and unawareness of Remote Learning for teaching educational courses in northwestern region universities of Nigeria.

Table 5. X^2 Table of significant differences in the level of University lecturer's awareness and unawareness of Remote learning for teaching

S/N	Observed frequencies				Expected frequencies				X^2-cal	α	DF	X^2-cri	Decision
	SD	D	A	SA	SD	D	A	SA					
1	10	5	184	150	51	54	138	106					
2	15	5	169	150	51	54	138	106					
3	120	150	44	35	51	54	138	106	737.22	0.05	27	40.11	Rejected
4	15	20	166	148	51	54	138	106					
5	65	95	120	69	51	54	138	106					
6	57	47	143	102	51	54	138	106					
7	74	54	140	81	51	54	138	106					

Table 5 revealed that the calculated X^2 which was (737.22) was greater than the critical X^2 which was (40.11) concerning the level of significance (0.05) and degree of freedom (27). The null hypothesis was rejected because; the critical X^2 value was less than the calculated X^2. Thus, there is a significant difference in the level of University Lecturers awareness and unawareness of Remote Learning for teaching educational courses in north Western region universities of Nigeria.

Hypotheses Two: There is no significant difference in the challenges of university Lecturers in using and non-using Remote Learning for teaching educational courses in North Western Region Universities of Nigeria during covid-19 pandemic.

Table 6. X^2 Table of significant differences in University Lecturers' Challenges in using and non-using Remote learning for teaching

S/N	Observed frequency				Expected frequency				X^2-cal	A	DF	X^2-cri	Decision
	SD	D	A	SA	SD	D	A	SA					
1	160	180	4	5	92	124	76	46					
2	66	94	122	67	92	124	76	46					
3	110	150	48	41	92	124	76	46	774.8	0.05	27	40.11	Rejected
4	15	25	161	148	92	124	76	46					
5	115	115	44	35	92	124	76	46					
6	70	102	110	67	92	124	76	46					
7	106	164	48	31	92	124	76	46					

Table 6 shows that the calculated X^2 (774.8) was greater than the critical X^2(40.11) along with the

level of significance (0.05) and degree of freedom (27). The table indicated that the null hypothesis was rejected because; the calculated X^2 was greater than the critical X^2. Thus, there is a significant difference in the challenges of university Lecturers in using and non-using Remote Learning for teaching educational courses in North Western Region Universities of Nigeria during covid-19 pandemic.

Discussion

The findings revealed that lecturers who participated in the study were aware of the remote learning model for teaching during covid-19, the above responses show that almost 95.7% (334 out of 349) agreed or strongly agreed that they were aware of Remote learning which has a greeter majority than others. This conforms with the findings of Youssef, & Abu-Hashem (2021) which indicated that lecturers in colleges of education in Sokoto state were also using Remote learning techniques for teaching some educational courses during covid-19 pandemic.

University lecturers in northwestern region universities were not utilizing the Remote learning model for teaching during COVID-19 this is because only 22.6% (79 out of 349) agreed to utilize Remote learning for teaching their courses while 77.4% (270 out of 349) disagreed. This conforms with the view of Oluwale (2020) Remote learning has not been fully instituted in most of the public tertiary institutions in Nigeria, even if it is instituted, practice is one of the major problems, especially in teacher education institutions.

Moreover, lecturers in the study have revealed many challenges in using remote learning for teaching where lack of constant electricity supply and inability to purchase simple laptops or smartphones by the students are the major challenges as 97.4% agreed with the challenges. This is in line with the view of Muhammad et al., (2020) Majority of the lecturers in colleges of education in Sokoto state Agreed to have many challenges in using Remote learning for teaching their educational courses which hinders the smooth implementation of the Remote Learning Model.

The findings from the inferential analysis via testing of the hypothesis showed that there is a significant difference between Lecturers' level of awareness and unawareness of Remote learning for teaching during COVID-19 as Table 5 revealed that there are strong differences in lecturers' awareness and unawareness of remote learning for teaching and this in conformity with the findings of Youssef, & Abu-Hashem, (2021).

The findings from the inferential analysis via testing of the hypothesis of Table 6 showed that there is a significant difference between lecturers' Challenges in using and non-using Remote learning for teaching during the COVID-19 pandemic; this was also in line with the findings of Robi, (2016).

CONCLUSIONS

The foregoing discussion shows that the respondents in the study were aware of the Remote learning model but they were not utilizing the Remote learning model for teaching their courses during covid-19 pandemic as a result of a lack of guidance and proper training. Similarly, the majority of the lecturers encountered different challenges in using the Remote learning model for teaching where lack of constant electricity supply and the inability to purchase a simple laptop or smartphone by the students are the major challenges.

LIMITATION AND FURTHER RESEARCH

The researchers could not spread the research survey beyond the sample size of North-western Region Universities of Nigeria due to the following reasons.
i.   Insecurity bedeviling the study area.
ii. The researcher was confronted with some difficulties in accessing data from Sample Universities.

As the research work was carried out in North-Western Region Universities of Nigeria, it needs to be carried out in some other Geo-Political zones of Nigeria to show the effectiveness of Remote learning techniques for teaching and learning. From the findings of the study, the following

recommendations were made:

1. Workshops, seminars, and in-house training should be organized for the university lecturers to guide and train properly on how to utilize remote learning models to facilitate teaching and learning during emergencies or crises like covid-19 pandemic.
2. Technological tools and other relevant infrastructures should be provided for the integration and adoption of the Remote learning model in the northwestern region universities of Nigeria.
3. Lecturers should select and utilize a model of Remote learning applicable to the courses they teach as there are varieties of remote learning models.
4. Government, Alumni, parent-teachers associations, and other relevant stakeholders should provide constant electricity supply in the universities of higher learning through some other sources like solar energy, generators, etc.

REFERENCES

Awotunde, P.A. & Ugodulunwa, C.A (2004). Research Methods in Education. Fab Anieh(Nig) Ltd, Jos Nigeria

Burell, A. (1997) 'A study into the future use of synchronous and asynchronous technologies in the distance ESL education area with an emphasis on collaborative earning'. Proceedings of the ED-MEDIA 97 & ED-TELECOM 97 - Calgary, Alberta, Canada

Creswell, J. W. (2014). *Research design: qualitative, quantitative, and mixed methods approaches (4th ed.)*. Library of Congress Cataloging in Publication Data. Printed in the United States of America.

Egede, C. & Bernadette, B. (2021) Lecturers' perception of their competence to teach online during the COVID-19 lockdown: a post-training evaluation

Graham, C.R., Henrie, C.R & Gibbos, A.S. (2014). Developing Models and Theory for Blended Learning Research. Research Perspectives, (2) pp13-33. New York, NY: Rutledge.

Halili, S.H, & Zainuddin, Z. (2015). Flopping the classroom: what we know and what we don't. *The online Journal of Distance Education and E-learning*, 3(1); 28-35

Hodges, C. Moore, S. Lockee, B. Trust, T. & Bond, A. (2020). The difference between emergency remote teaching and online learning.

Ibrahim, J.S & Shalizad, A.(2015). The Adoption of Blended Learning in Higher Education Institutions in Nigeria. *International Journal of Management and Social Science Research*. 4(10), 64-70

Ismaila, A. A., (2020). Pre-service teachers' perception on the adoption of smartphone for learning in colleges of education in North-west, Nigeria. Master Thesis. Ahmadu Bello University, Zaria, Nigeria.

John, G.O & Elijah O. (2021) Methods of Investigating the Use of Remote learning in Higher Education: A Review of Recent Studies in university of Nairobi. *International Journal of Computer Applications* 116(9).

Kusmaryano, I., Jupriyanto, B. & Widya., K. (2021) Systematic literature Review on the effectiveness of Remote learning: Problems, opportunities, challenges and predictions: *International Journal of Education* 14(1) pp62-69 doi:10.17509/ije.v14i1.29191

Muhammad, N.D Isma'il, A. A & Maccido, I. (2020) Lecturers' awareness and utilization of Blended Learning for teaching educational courses in colleges of education in Sokoto state, Nigeria. *Journal of Education in Developing Areas* (JEDA) Vol. 28, (1) March 2020 ISSN: 189420X

Oluwale, M.O. (2020). College Lecturer's Awareness and Perception of Using Remote Learning. *International Journal for Innovative Technology Integration in Education*.

Ray, K. (2020). The Just in time playbook for remote Teaching and Learning.

Riah, E., Galang, A.A. & Hallar, B.J. (2020) The impact and Effectiveness of Remote Learning on Teaching and learning. *International Journal of Computing Science Research* ISSN: 2546-0552 5(1) doi:10.25147/ijcsr.2017.001.47 https://stepacademic.net

Robi, D. (2016) Students' perceptions towards the use of Remote learning: A case study of the second-grade students at one high school in Bandung. *Journal of English and Education* 2016, 4(2), 80-100

WHO. (2020). Coronavirus disease 2019 Report (COVID-19), Situation Report – 59. Retrieved from: https://www.who.int/docs/defaultsource/coronaviruse/situation-reports/20200319-sitrp-

59-covid-19.pdf?sfvrsn=c3dcdef9_2

Tian, W.K & abdul'aziz, A. (2021). Teachers' and Students' Perceptions Towards Remote Learning during the Covid-19 Pandemic: A Systematic Review. *International Journal of Academic Research* in progressive education and development. ISSN: 2226-6348

Usman. Mika'ilu, M. & Nasiru M.G (2019). Effectiveness of the use of ICT tools on Students learning in senior secondary schools in Sokoto South Local Government, Sokoto State, Nigeria. *International Journal of Innovative Information Systems& Technology Research* 7(3):25-33, July-Sept., 2019

World Bank (2020). The COVID-19 pandemic: shocks to education and policy responses

Youssef, M.S & Abu-hashem, M.A (2021). Analyzing lecturers' perceptions on traditional vs. distance learning: A conceptual study of emergency transferring to distance learning during COVID-19 pandemic. *Journal of Education and Information Technologies volume* 27, pages 3225–3245

Zubrick, S. R., Silburn, S. R., & Prior, M. (2005). Resources and contexts for child development: Implications for children and society. No time to lose: The wellbeing of Australia'schildren. Melbourne University Press.