

AVAILABILITY AND UTILIZATION OF ONLINE RESOURCES FOR E-LEARNING IN EDUCATIONAL INSTITUTIONS DURING COVID-19 ERA IN IMO STATE

FIAT MARY UZOEGBU, CLN
Alvan Ikoku Federal College of Education, Owerri

AMAH, JOHN A.
Auchi Polytechnic, Edo state
johnamah@gmail.com

OGUGUA, UDEMEZUE JOSEPH
Chukwuemeka Odumegwu Ojukwu University, Igbariam, Anambra State
joeogugs2095@yahoo.com

ABSTRACT

The research work was on the availability and utilization of online resources for e-learning in educational institutions during Covid-19 era in Imo state. A descriptive survey design was used for the study. The sample comprised of 50 lecturers (10 each) from the 5 tertiary institutions in Imo state that was selected using the simple random sampling technique. A checklist and structured questionnaire were used for collection of data. The instruments were subjected to face validation and pilot test using Cronbach Alpha which gave a reliability coefficient value of 0.96. Data collected from the study were analyzed using mean scores. The study found that e-journals, e-books, e-databases, and electronic exhibitions were the online resources available in educational institutions. The e-learning platform available in the educational institutions in Imo state are Facebook, Whatsapp, Google Meet, Zoom, Course Management Systems, and telegram. The extent of utilization of online resources such as e-journals, e-books, and e-databases in the educational institutions during Covid 19 era in Imo state was on a low extent. The challenges hindering the availability of online resources for e-learning in the educational institutions during Covid 19 era in Imo state are inadequate funding to procure e-learning tools, insufficiency of library resources for conversion to online resources, and high cost of procuring e-learning tools. The challenges faced by educational institutions in utilizing online resources for e-learning during Covid 19 era in Imo state are inadequate funding to train lecturers on the use of e-learning tools, erratic power supply, and high cost of data to use online resources for e-learning. The study concluded that since the Covid 19 era has exposed the deficiencies of educational institutions in their applying and utilizing these online resources for e-learning, it is expected that the educational institutions in the post Covid 19 era, should by now be prepared and ready to implement the full utilization of online resources for their e-learning activities. The recommendations were that adequate funding to procure e-learning tools should be provided by the government, and the cost of procuring e-learning tools should be subsidized by the government

Keywords: Availability, Utilization, Online resource, e-learning, Covid 19, Educational institutions

Introduction

With the presence of the ravaging COVID-19 virus which has globally affected more than 2million lives since the 3rd quarter of 2019 till date (European Centre for Disease Prevention and Control (ECDC, 2021), various institutions, organizations and educational centers were shut down due to the government's implementation of social distancing, self-quarantine, isolation, and general lockdown to curtail spread of Covid-19 virus (WHO, 2020). The educational sectors were the worst hit as all academic activities and programs were suspended and students were made to sit at home. With this development, the educational institutions were challenged to provide an alternative platform that will enable academic activities to hold

and continue as learners cannot stay at home forever since the end of the pandemic was not in view any time soon (Agim & Oraekwe, 2021). This was the urge that motivated most educational institutions to organize online education called electronic learning (e-learning)

E-learning is an alternative learning method for students to continue with their lessons at the comfort of their homes without the need for physical contact. E-learning is also referred to as educational technology for teaching and learning (Ojukwu, Agim & Ameh, 2021). E-learning implies that the learner is at a distance from the tutor or instructor, that the learner uses some form of technology (usually a computer) to access the learning materials, that the learner uses technology to interact with the tutor or instructor and other learners, and that some form of support is provided to learners (Sharifabadi, 2006). E-learning is an improved system of learning that utilizes connected devices and computers to learn. E-learning is enabled through the digitization of library resources which are known as online resources

Online resource also known as e-resources or internet resources are digital or automated text such as e-books, e-journals, e-leaflets, e-magazines, and all other reading materials that are enabled to be viewed online using the computer or any other connected device. Egberongbe (2011) sees online information resources are invaluable research tools that complement the print-based resources and are becoming more and more important for the academic community, nowadays. Online resources are expected to improve e-learning activities in schools. E-learning for schools should have sufficient online resource that will boast learning. During the Covid 19 lockdown, many educational institutions have transformed their traditional teaching and learning modes into digital and virtual platforms, where books, journals and magazines are converted to e-books, e-journals, and e-magazines and shared via e-learning platforms to teach students (Agim, Ninyio, Abubakar & Rabi'u, 2021). According to Agim et al, other online resources provided for teaching and learning in the post Covid-19 era are e-journals, e-books, e-databases, online search engines, on-line encyclopedias, e-newspapers, e-magazines, on-line libraries, academic journals database, e-conference proceedings, e-reports, e-maps, e-pictures/photographs, e-manuscripts, e-theses, e-Audio, e-Images, e- Subject Guide, e-newsletters, and electronic exhibitions. The need for these online resources is to provide educational institutions with the technological base to apply an online driven and electronic based learning that will provide the students with readily available online information resources that will improve on their learning abilities due to restrictions on physical or classroom contacts.

Notwithstanding the relevance of applying these online resources for e-learning, most educational institutions do not have ICT facilities for e-learning to thrive. Lecturers in these educational institutions are not trained on how to apply these online resources for e-learning. Most of the online resources online resources are not readily available for use in the educational institutions coupled with the fact that there is inadequate funding to most educational institutions to set up and drive the process of acquiring online resources and other e-learning tools. There is also an inherent skill gap among lecturers and students in the Nigerian educational institutions on their accessibility and use of online resources for e-learning task. It is in this view that this research will examine the availability and utilization of online resources for e-learning in educational institutions during Covid 19 era in Imo state

OBJECTIVES OF THE STUDY

The main purpose of this study is to examine availability and utilization of online resources for e-learning in educational institutions during Covid 19 era in Imo state. The specific objectives include to:

1. Find out the online resources available in educational institutions in Imo state
2. Find out the e-learning platform available in educational institutions in Imo state
3. Determine the extent of utilization of online resources for e-learning in educational institutions during Covid 19 era in Imo state
4. Find out the challenges hindering the availability of online resources for e-learning in educational institutions during Covid 19 era in Imo state
5. Find out the challenges faced by educational institutions in utilizing online resources for e-learning during Covid 19 era in Imo state

METHODOLOGY

A descriptive survey research design was used for the study. A descriptive survey design is a study that aims at collecting data on something and describing it in a systematic manner. This involves collection of data on a representative population of the target audience, on which generalization is made (Nworgu, 2015). The area of the study is educational institutions in Imo state. The sample comprised of 10 lecturers selected randomly from various departments from each of the 5 tertiary institutions in Imo state (Imo state University, IMSU); Federal University of Technology, FUTO); Federal Polytechnic Nekede, FPNO); Federal College of Land Resource, FCLRT); and Alvan Ikoku Federal College of Education, AIFCE). A checklist and structured questionnaire on a four (4) – point Likert scale were used for collection of data for this study. The instruments were subjected to face validation and pilot test using Cronbach Alpha which gave a reliability coefficient value of 0.96. The researchers employed the use of an assistant from each of the selected educational institutions. The study used on the spot method of distribution and data collection from the respondents at their various institutions. Data collected from the study were analyzed using mean scores

DATA ANALYSIS

Research Question 1: What are the online resources available in educational institutions in Imo state?

Table 1: Checklist on the online resources available in educational institutions in Imo state

S/NO	Items	FUTO	IMSU	FPNO	AIFCE	FCLR	Remarks
1	e-journals	√	√	√	√	√	Available
2	e-books	√	√	√	√	√	Available
3	e-databases	√	√	√	√	√	Available
4	online search engines	√	√	√	√	√	Available
5	on-line encyclopedias	√	√	√	√	√	Available
6	e-newspapers/	√	√	√	√	√	Available
7	e-magazines	√	√	√	√	√	Available
8	on-line libraries	√	√	√	√	√	Available
9	academic journals database	√	√	√	√	√	Available
10	e-conference proceedings	√	√	√	√	√	Available
11	e-reports	√	√	√	√	√	Available
12	e-maps	√	√	√	√	√	Available
13	e-pictures/photographs	√	√	√	√	√	Available
14	e-manuscripts	√	√	√	√	√	Available
15	e-theses	√	√	√	√	√	Available
16	e-Audio	√	√	√	√	√	Available
17	e-Images	√	√	√	√	√	Available
18	e- Subject Guide	√	√	√	√	√	Available
19	e-newsletters	√	√	√	√	√	Available
20	electronic Exhibitions	√	√	√	√	√	Available

The table 1 above discovered that e-journals, e-books, e-databases, online search engines, on-line encyclopedias, e-newspapers. e-magazines, on-line libraries, academic journals database, e-conference proceedings, e-reports, e-maps, e-pictures/photographs, e-manuscripts, e-theses, e-Audio, e-Images, e-Subject Guide, e-newsletters, and electronic exhibitions were the online resources available in all the educational institutions in Imo state

Research Question 2: What is the e-learning platform available in educational institutions in Imo state?

Table 2: Checklist on thee-learning platform available in educational institutions in Imo state

S/NO	Items	FUTO	IMSU	FPNO	AIFCE	FCLR	Remarks
1	Facebook	√	√	√	√	√	Available
2	Whatsapp	√	√	√	√	√	Available
3	Twitter	√	√	√	√	√	Available
4	GoogleMeet	√	√	√	√	√	Available
5	Zoom	√	√	√	√	√	Available
6	Instant Messaging	√	√	√	√	√	Available
7	Blogs	√	√	√	√	√	Available
8	Google+	0	0	0	0	0	Not Available
9	LinkedIn	√	0	√	√	0	Available
10	Skype	√	0	√	√	0	Available
11	MySpace	0	0	0	0	0	Not Available
12	Wikis	0	0	0	0	0	Not Available
13	Course Management Systems	√	√	√	√	√	Available
14	E-mails	√	√	√	√	√	Available
15	Computer	√	√	√	√	√	Available
16	Educational websites	√	√	√	√	√	Available
17	Telegram	√	√	√	√	√	Available

In Table 2, the e-learning platform available in majority of the educational institutions in Imo state are Facebook, Whatsapp, Twitter, Google Meet, Zoom, blogs, Instant Messaging (IM),LinkedIn, Skype, Course Management Systems, E-mails, computer, educational websites, and telegram. However, Google+, MySpace, and Wikis were not available in educational institutions in Imo state

Research Question 3: What is the extent of utilization of online resources for e-learning in educational institutions during Covid 19 era in Imo state?

Table 3: Utilization of online resources for e-learning in educational institutions during Covid 19 era in Imo state

S/NO	Items	Mean	Decision
1	e-journals	2.11	Low extent
2	e-books	2.16	Low extent
3	e-databases	2.09	Low extent
4	online search engines	2.35	Low extent
5	on-line encyclopedias	2.02	Low extent
6	e-newspapers/	2.14	Low extent
7	e-magazines	2.10	Low extent
8	on-line libraries	2.13	Low extent
9	academic journals database	1.88	Low extent
10	e-conference proceedings	1.74	Low extent
11	e-reports	1.66	Low extent
12	e-maps	1.39	Low extent
13	e-pictures/photographs	2.15	Low extent
14	e-manuscripts	1.62	Low extent
15	e-theses	2.14	Low extent
16	e-Audio	1.23	Low extent
17	e-Images	1.13	Low extent
18	e- Subject Guide	1.88	Low extent
19	e-newsletters	1.74	Low extent
20	electronic exhibitions	1.10	Low extent

In Table 3, the extent of utilization of online resources such as e-journals, e-books, e-databases, online search engines, on-line encyclopedias, e-newspapers. e-magazines, on-line libraries, academic

journals database, e-conference proceedings, e-reports, e-maps, e-pictures/photographs, e-manuscripts, e-theses, e-Audio, e-Images, e- Subject Guide, e-newsletters, and electronic exhibitions in all the educational institutions during Covid 19 era in Imo state was on a low extent

Research Question 4: What are the challenges hindering the availability of online resources for e-learning in educational institutions during Covid 19 era in Imo state

Table 4: Challenges hindering the availability of online resources for e-learning in educational institutions during Covid 19 era in Imo state

S/N	Items	Mean	Decision
1	Inadequate funding to procure e-learning tools	3.14	Agree
2	Insufficiency of library resources for conversion to online resources	3.12	Agree
3	High cost of procuring e-learning tools	3.05	Agree
4	Poor ICT policy	3.12	Agree
5	Poor support of administrators towards the adoption of e-learning	3.10	Agree
6	Lack of skilled technicians to install the online and e-learning tools	3.15	Agree

In Table 4, the challenges hindering the availability of online resources for e-learning in all the educational institutions during Covid 19 era in Imo state are inadequate funding to procure e-learning tools, insufficiency of library resources for conversion to online resources, high cost of procuring e-learning tools, poor ICT policy, poor support of administrators towards the adoption of e-learning, and lack of skilled technicians to install the online and e-learning tools.

Research Question 5: What are the challenges faced by educational institutions in utilizing online resources for e-learning during Covid 19 era in Imo state?

Table 5: Challenges faced by educational institutions in utilizing online resources for e-learning during Covid 19 era in Imo state

S/N	Items	Mean	Decision
1	Inadequate funding to train lecturers on the use of e-learning tools	3.23	Agree
2	Insufficiency of e-learning infrastructure	3.12	Agree
3	Poor confidence of staff in the use of e-learning applications	3.15	Agree
4	Erratic power supply	3.02	Agree
5	Poor maintenance culture on e-learning tools	2.90	Agree
6	Low usage literacy of e-learning tools by students	3.05	Agree
7	Lack of technical support	3.12	Agree
8	High cost of data to use online resources for e-learning	3.02	Agree
9	Lack of incentive to change staff readiness to adopt e-learning tools	3.22	Agree
10	Low students' acceptance and attitude to the use e-learning tools	2.98	Agree
11	Poor staff attitude towards use of e-learning tools	3.11	Agree

In Table 5, the challenges faced by educational institutions in utilizing online resources for e-learning during Covid 19 era in Imo state are inadequate funding to train lecturers on the use of e-learning tools, insufficiency of e-learning infrastructure, poor confidence of staff in the use of e-learning applications, erratic power supply, poor maintenance culture on e-learning tools, low usage literacy of e-learning tools by students, lack of technical support, high cost of data to use online resources for e-learning, lack of incentive to change staff readiness to adopt e-learning tools, low students' acceptance and attitude to the use e-learning tools, and poor staff attitude towards use of e-learning tools

Discussion of Findings

From the study findings, it can be observed that e-journals, e-books, e-databases, online search engines, on-line encyclopedias, e-newspapers. e-magazines, on-line libraries, academic journals database, e-conference proceedings, e-reports, e-maps, e-pictures/photographs, e-manuscripts, e-theses, e-Audio, e-Images, e- Subject Guide, e-newsletters, and electronic exhibitions were the online resources available in all the educational institutions in Imo state. This finding is in line with the study of Lavanya and Santharooban

(2018) who stated that online resources are e-journals, e-books, e-databases, and online search engines which comes under the broader term of electronic resources.

The e-learning platform available in majority of the educational institutions in Imo state are Facebook, Whatsapp, Twitter, Google Meet, Zoom, blogs, Instant Messaging (IM), LinkedIn, Skype, Course Management Systems, E-mails, computer, educational websites, and telegram. However, Google+, MySpace, and Wikis were not available in educational institutions in Imo state. This finding is in line with the study of Rajendra (2009) who gave e-learning platforms as course management systems (CMS), blogs, wikis, e-mails, and messenger etc

The extent of utilization of online resources such as e-journals, e-books, e-databases, online search engines, on-line encyclopedias, e-newspapers, e-magazines, on-line libraries, academic journals database, e-conference proceedings, e-reports, e-maps, e-pictures/photographs, e-manuscripts, e-theses, e-Audio, e-Images, e- Subject Guide, e-newsletters, and electronic exhibitions in all the educational institutions during Covid 19 era in Imo state was on a low extent. This finding is in line with the study of Agim, Ninyio, Abubakar and Rabi'u (2021) who stated that e-magazines, on-line libraries, e-journals, e-books, academic journals database, e-manuscripts, and e-theses are mainly used in educational institutions

The challenges hindering the availability of online resources for e-learning in all the educational institutions during Covid 19 era in Imo state are inadequate funding to procure e-learning tools, insufficiency of library resources for conversion to online resources, high cost of procuring e-learning tools, poor ICT policy, poor support of administrators towards the adoption of e-learning, and lack of skilled technicians to install the online and e-learning tools. This finding is in line with the study of Kisanga and Ireson (2015) who noted that lack of support and poor funding affects the availability and adoption of e-learning

The challenges faced by educational institutions in utilizing online resources for e-learning during Covid 19 era in Imo state are inadequate funding to train lecturers on the use of e-learning tools, insufficiency of e-learning infrastructure, poor confidence of staff in the use of e-learning applications, erratic power supply, poor maintenance culture on e-learning tools, low usage literacy of e-learning tools by students, lack of technical support, high cost of data to use online resources for e-learning, lack of incentive to change staff readiness to adopt e-learning tools, low students' acceptance and attitude to the use e-learning tools, and poor staff attitude towards use of e-learning tools. This finding is in line with the study of Yekini, Adigun, Ojo and Akinwole (2020) who noted that lack of Internet access, affordability of computers and lack of computer skills, and poor infrastructures are components of digital divide in utilization of e-learning

Conclusion

In view of the forgoing, it can be concluded that since the Covid 19 era has exposed the deficiencies of educational institutions in their extent of applying and utilizing these online resources for e-learning, it is expected that the educational institutions in the post Covid 19 era, should by now be prepared and ready to implement the full utilization of online resources for their e-learning activities. Availability and utilization of these online resources for e-learning in educational institutions can enable them to cover up any future effects or instances where a similar lockdown or pandemic would be declared. This is expected to cover the teaching and learning gap in the delivery of educational services in these educational institutions in Imo state and by extension, Nigeria. The availability and utilization of these online resources for e-learning in educational institutions will enable the learners to continue their education and even attend classes and do their courser work or assignment online and even at the comfort of their hostels , homes, or remote areas they find themselves. Citing the forgoing inadequacies of most educational institutions towards the procuring and utilization of these online resources for e-learning, the educational institutions should see this advent of this pandemic as an avenue for the improvement of their deficiencies towards strengthening their use of these tools now and in the future.

Recommendations

As part of the solutions to resolve the challenges faced by educational institutions in their availability and utilization of online resources for e-learning, during the Covid-19 pandemic and the post Covid era, a number of recommendations have been given:

- i. Adequate funding to procure e-learning tools should be provided by the government
- ii. There should be sufficiency of library resources for conversion to online resources for use during e-learning session
- iii. The cost of procuring e-learning tools should be subsidized by the government
- iv. There should be a workable ICT policy that will strengthen the availability and utilization of these online resources for e-learning in educational institutions
- v. Administrators of educational institutions should give full support towards the adoption of e-learning in the school
- vi. Skilled technicians should be employed to install the online and e-learning tools.
- vii. Adequate funding to train lecturers on the use of e-learning tools should be provided and sustained
- viii. The problems of erratic power supply should be resolved so as to improve the use of these online resources for e-learning
- ix. Cost of data to use online resources for e-learning should be cheap or provided free of charge to lecturers and students
- x. There should be sufficiency of e-learning infrastructure such as computers, satellite, databank, wifi, network cables and system applications that will drive the setting up of the e-learning process

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