

Usage of Open Digital Educational Resources for Teaching and Research Among Lecturers in Michael and Cecilia IBRU University, (MCIU) Agbarha-Otor, Delta State, Nigeria

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Abstract - Advancements in ICT have led to the integration of technologies in teaching, learning and research making the world a global village in information dissemination today. This study investigated the usage of digital open educational resources for teaching and research among lecturers in Michael and Cecilia Ibru university, (MCIU) Agbarha-Otor, Delta State, Nigeria. Five research objectives with conforming research questions guided the study. The study adopted a descriptive research design. The population of the study consists of One Hundred and ten lecturers from Michael and Cecilia Ibru University. The total enumerative and accidental sampling was adopted in selecting the lecturers. The instrument for data collection was a structured questionnaire with the title “Usage of Open Digital Educational Resources (ODERQ)”. Data was analyzed, using frequency and percentage. Findings revealed that MCIU lecturers are very aware of ODER, and they know how it can be used in the classroom and their level of usage was high. They consult open access journals and open e-books amongst others for their research work and also to prepare their lecture notes. The benefit derived from ODER was that it provides free online access to the literature necessary for their research work and it also provides quality free materials which they make use of in carrying out their research work. Poor power supply, lack of retrieval skills and inadequate ICT facilities among others were the identified problems associated with the use of ODER. The study recommended among others that lecturers should make frequent digital use of open educational resources. Also, orientations, workshop and seminar should be organized by librarians and the ICT unit of the university on the use of ODER for academic purpose.

Keywords: Digital, Open Educational Resource, Open Access, Technology, Information and Communication Technology, Research

I. INTRODUCTION

Technology and accessible educational materials have allowed more individuals to have access to and exchange information with one another. This has resulted in the proliferation of tools that teachers and researchers from all over the world may use to create and disseminate content for the benefit of their students. Over the past few decades, there have been numerous shifts in the organisation of educational resources, the availability of those resources, and the medium utilised to communicate knowledge (Anthony, Bio & Vikoo, 2018 and Midha & Kumar, 2022).

The term “open access” describes the policy of not placing any limits on who can access or make use of a body of information, including those who seek for and use that information. The ability to reuse, modify, remix, and redistribute the content is a huge value for the users. According to (Adeyokun, Adebowale, & Yaya, 2015).

On-Demand Electronic Resources (ODERs) are described as those resources that do not need the user to pay any fees, subscriptions, tuition, or registrations and do not impose any duties on the user (Issa, Ibrahim, Onojah & Onojah, 2020). Open Educational Resources (OER) are digital resources for education and research that are either in the public domain or have been shared under an open licence that allows for their use, adaptation, and redistribution without restriction or payment (UNESCO, 2021).

The term “open educational resources” (OERs) is used to describe any type of resource that has been analyzed and created for educational purposes, including but not limited to textbooks, multimedia apps, streaming videos, course materials, curriculum maps, and research papers. Reference: (Anthony, Bio, & Vikoo, 2018).

An essential need for facilitating scholarly use of the resource is the flexibility provided by publicly licensed content in terms of both law and technology. Anyone in the university community, including students, faculty, and staff, can use these resources without having to worry about licencing fees, passwords, or royalties (Butcher, 2015).

II. LITERATURE REVIEW

Numerous studies have looked at how researchers might benefit from using open educational resources online. Ivwithreghweta and Ambrose (2020) define it as “digital assets made freely available to instructors for use in their classrooms, student projects, and research.” Textbooks, syllabi, instructional modules, simulations, content, software tools, licences, and best practises are all examples of resources. So are audio-video lectures, sounds and music, tests, quizzes, lesson plans, outlines, and blueprints. Textbooks, modules, films, tests, software, and any other

items or methods used to facilitate access to information are all examples of resources. Many of the identified ODERs locations have a poor degree of use, as found by Issa, Ibrahim, Onojah, and Onojah (2020), while the utilisation of the remaining sites is around average. The study's results suggest that teachers and researchers may benefit from placing greater emphasis on boosting pupils' awareness.

Researchers Midha and Kumar (2022) found that ODERs are widely used and well-known throughout the academic community at premier North Indian universities. YouTube is used more frequently than any other ODERs initiative, showing that students prefer to learn by listening to and watching videos than reading text.

Administrators and policymakers at private tertiary institutions, according to Nyamwembe, Tanui, and Wamutitu (2018), should think about launching a strategic campaign to raise awareness of ODERs. As a result, both undergraduates and faculty would have a better understanding of ODERs and be more likely to use them.

Deshmukh (2018) argues that librarians should promote understanding of open access digital educational resources (ODER) and the potential benefits of adopting ODER among students, faculty, and the larger university community. He suggests attending seminars like orientation, workshops, conferences, and others to help with this.

Nwana, Egbe, and Ugwuda (2017) found that while both undergraduates and professors were aware of the abundance of e-Learning materials, few really made use of them in their teaching. A lack of awareness among the intellectual community, insufficient funding, technical challenges, a lack of skilled manpower, and technological difficulties are all factors that have been found to hinder the use of open access educational resources, according to research by Adeyokun, Adebowale, and Yaya (2015).

Research done by Ivwichreghweta and Ambrose (2020) found that postgraduate students at the National Open University, Benin Study Centre, Edo State Nigeria, were familiar with the concept of ODERs, and their degree of utilisation was proportional to their level of familiarity.

According to Ivwichreghweta and Oyeniran (2013), the increased importance placed on digital information resources is reflected in increased efficiency in all areas of human endeavour, research, education, and industry. They also found that most respondents said they used the internet for research, supporting their hypothesis.

Research by Wiche and Ogunbodede (2021) indicates that students at Ignatius Ajuru University of Education in River State have a deep familiarity with and appetite for ODERs. Some of the obstacles to making good use of ODERs included students' lack of information literacy skills and digital literacy training, outdated infrastructure (such as unreliable electricity and slow internet), students' reluctance

to use libraries, and teachers' reluctance to provide guidance on the subject. One more difficulty was caused by ODERs not giving enough help.

Multiple authors, including Ivwichreghweta (2012), Ivwichreghweta and Onoriode (2012), Ogbomo and Ivwichreghweta (2013), and Ivwichreghweta and Igere (2014), have noted that a shortage of electricity prevents library staff and patrons from making full use of open access electronic materials.

Ivwichreghweta and Eireyi-Fidelis (2022) found that both faculty and graduate students at Western Delta University, Oghara were familiar with and made use of electronic academic database resources for conducting research, drafting seminar/conference papers, completing coursework, and keeping up to date on a variety of disciplines. In a related study, researchers discovered that both undergraduate and graduate students had a comprehensive understanding of the benefits of electronic academic database resources.

III. STATEMENT OF THE PROBLEM

The term "open access," which relates to ODERs, describes the method of making data available to researchers and other users without any barriers (Adeyokun, Adebowale & Yaya, 2015). Most of the literature on the topic, including works by Nwana, Egbe, and Ugwuda (2017) and Adeyokun, Adebowale, and Yaya, (2015), note that despite the growing interest of the academic community and the low cost of the education they provide, there is a surprisingly small number of lecturers who have experience with ODERs.

As far as the researcher could tell, the similar situation existed at Michael and Cecilia Ibru University. Perhaps this issue is related to people's general unfamiliarity with ODERs. The goal of this research was to find out how often MCIU teachers in Agbarha-Otor, Delta, make use of ODERs.

IV. PURPOSE OF THE STUDY

The purpose of this study is to investigate the usage of ODERs for teaching and research among lecturers in Michael and Cecilia Ibru university, (MCIU) Agbarha-Otor, Delta State, Nigeria. The specific objective of the study is to

1. Know the level of awareness of ODER by lecturers in MCIU.
2. Know the types of ODER used by the MCIU lecturers in teaching and learning.
3. Identify the purpose of using ODER by the lecturers.
4. Know the benefits derived from the use ODER for teaching and learning by MCIU lecturers.
5. Identify the barriers associated with the use of ODER by the lecturers.

A. Research Questions

The following research questions guided this study:

1. What is the level of awareness of ODER by MCIU lecturers?
2. What are the types of ODER used by the lecturers for teaching and learning in MCIU?
3. What is the purpose of using ODER by the lecturers?
4. What are the benefits derived from the use ODER by MCIU lecturers?
5. What are the barriers associated with the use ODER by the MCIU lecturers?

V. METHODOLOGY

The survey used in this study was of a descriptive nature. There were a total of 110 distinct faculty members included in the study. Lecturers from Delta State's Michael and

Cecilia Ibru University in Agbarha-Otor make up the group. The researchers behind this study employed a survey they created and dubbed the "Open Digital Educational Resources Questionnaire (ODERQ)". Eighty-five (85) questionnaires were returned out of a total of one hundred and ten (110) sent out. Both systematic random sampling and exhaustive enumeration were employed in the course of the investigation. Questions were asked to respondents in the form of a questionnaire. Frequency and percentage-based statistics were used to break down the data.

VI. RESULTS

The findings of the study are presented in the following tables with explanations.

A. Research Question One: What is the level of awareness of ODERs by MCIU lecturers?

TABLE I AWARENESS OF ODER

Awareness of ODER	Percentage (%)
I have heard of ODERs, but don't know much about them	9 (11%)
I am somewhat aware of ODERs but I am not sure how they can be used	15 (18%)
I am very aware of ODERs and know how they can be used in the classroom	61 (72%)

Table I shows that the vast majority of MCIU lecturers (61 out of 73) are aware of ODERs and are comfortable with how they can be used in the classroom. Possible explanation: instructors may now access these resources digitally and use and re-use them for free in their classrooms, laboratories, and research projects. This result agrees with the results of Midha and Kumar (2022), who found that the academic community at prominent universities in North India is familiar with and makes considerable use of ODERs. According to research by Wiche and Ogunbodede, students at Ignatius Ajuru University of Education in River State have a strong understanding of open educational resources (ODERs) and make extensive use of them (2021).

B. Research Question Two: What are the types of ODERs used by lecturers in Michael and Cecilia Ibru University, Agbarha-Otor for teaching and learning?

Table II shows that great majority of teachers (84%) use open access publications. Following this, open e-books were selected by 61 (72%) of respondents. Possible explanation: they use it when creating class notes. Relating back to their origins (cause and effect).

This conclusion is consistent with the findings of Ivwighreghweta and Eireyi-Fidelis (2022), who discovered that both faculty and graduate students at WDU, Oghara had a deep familiarity with electronic academic database resources.

TABLE II TYPES OF ODER USED & UNUSED

ODERs	Used (%)	Unused (%)
MIT Open courseware	44(52%)	41(48%)
Courseware	61(72%)	24(28%)
Open access journals	71 (84%)	14(16%)
Open audio/video	34(40%)	51(60%)
Open e-books	61(72%)	24(28%)
Open courses	52(61%)	33(39%)
Open conferences proceedings	49(58%)	36(42%)
YouTube video	51(60%)	34 (40%)

C. Research Questions 3: What is the level of usage of ODERs by the lecturers in MCIU lecturers?

According to Table III, a significant proportion of MCIU academics use ODER in their research. This proportion is 71%. The second largest group, which consists of 21 people, accounts for 25 percent of individuals who use it in this manner to prepare materials for the classroom.

This result is consistent with the results that Ivwighreghweta and Eireyi-Fidelis (2022) discovered. They discovered that faculty members and graduate students at WDU, Oghara often visited electronic academic database resources. This result fits with their findings.

TABLE III LEVEL OF USAGE OF ODERs

Usage	SA		A		D		SD	
	No.	%	No.	%	No.	%	No.	%
I use ODERs for my research work	71	83	-	-	10	12	4	5
I use it to prepare my lecture notes for teaching	62	73	6	7	-	-	17	20
To broaden the range of my teaching methods	29	34	25	29	15	17	16	19
To stay up-to-date in a subject or topic area	30	35	21	25	24	28	10	12
To connect with researchers who have similar interests (e.g., by reading comments they have posted about resources)	19	22	29	34	7	8	30	36
To give to students as compulsory self-study materials	15	17	28	33	40	47	2	3
To provide e-learning materials to online learners.	41	48	3	4	21	25	20	23
To engage my students more fully in a topic area	25	29	25	29	30	35	5	6

D. Research Questions 4: What are the benefits derived from the use ODERs by MCIU lecturers?

TABLE IV BENEFITS OF DOAR USAGE

Benefits	SA		A		D		SD	
	No.	%	No.	%	No.	%	No.	%
ODERs can be accessed online free of charge	25	29	24	28	21	25	15	18
It increases impact of researchers work	34	40	21	25	23	27	7	8
ODERs provide quality free materials for learning	51	60	9	11	5	6	20	23
It provides free online access to the literature, necessary for one's research	56	66	9	11	15	17	5	6
ODERs provides increased citation to published scholarly work	41	48	7	8	7	8	30	36
DOER helps in career development	34	40	21	25	15	18	15	18

Table IV demonstrates that 56 of the respondents had the opinion that ODERs provide free online access to the information that is required for their research, while only 9 of the respondents have the opposite opinion. The next highest priority, at 51 (60%) percentage points, was making high-quality educational resources available for free, followed by 11 (11%) percentage points. It's possible that this is due to the fact that academics are now required to publish articles as part of their professional development activities and also provide high-quality lecture notes for

their students. This research is in agreement with the findings of Ivwithreghweta and Eireyi-Fidelis (2022), who discovered that faculty members and graduate students at WDU, Oghara frequently rely on databases to conduct research, draught seminar and conference papers, and stay up to date on developments in their respective fields of study.

E. Research Questions 5: What are the barriers associated with the use of ODERs by MCIU lecturers?

TABLE V BARRIERS OF USING DOER

Barriers	SA (%)	A (%)	D (%)	SD (%)
Poor Internet connectivity	42(49%)	9(11%)	30(35%)	4(5%)
Unstable power supply	39(46%)	10(12%)	6(7%)	30(35%)
Lack of retrieval skills	27(32%)	21(25%)	28(33%)	20(23%)
Inadequate computers	65(76%)	2(3%)	8(9%)	10(12%)
Inadequate ICT facilities	23(27%)	23(27%)	9(11%)	30(35%)
Lack of awareness of DOER	40(47%)	5(6%)	21(26%)	19(21%)
Lack of internet search skills	36(42%)	7(8%)	40(47%)	2(3%)
Download delay	19(22%)	26(31%)	20(24%)	20(24%)

Table V illustrates the distribution of Internet connection problems according to their frequency. Next, 58% of respondents reported that they were experiencing problems

paying their power bills on time. The conclusion that can be drawn from this is that the inadequate energy infrastructure at MCIU is to blame for the academics' inability to use

ODERs in a dependable manner. It was also claimed that there were insufficient information and communication technology (ICT) capabilities, as well as a lack of retrieval skills. Power supply is a significant barrier to the efficient use of open access electronic resources by both library staff and patrons, which is consistent with the findings of Ogbomo and Ivwighreghweta (2013), Ivwighreghweta and Onoriode (2012), Ivwighreghweta and Onoriode (2012), and Ivwighreghweta and Onoriode (2012).

VII. RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

1. Conferences, orientation, workshop and seminar should be organized for the lecturers by the university library on the proper use of the ODERs.
2. The current educational reforms going on by the Nigerian University Commission should aim at given e-learning a place in the university curriculum.
3. Efforts should be made by the ICT unit of the university to equip both lecturers with the much-needed internet and ICT skills to access, evaluate and use ODERs.
4. University authorities should encourage their lecturers to make use of ODERs because of the numerous benefits it possesses towards teaching, learning and research.

VIII. CONCLUSION

Open Educational Resources, often known as OERs, are gaining popularity in higher education as a practical and cost-effective substitute for pricey textbooks. According to the findings of the study, MCIU instructors were well familiar with ODERs and made frequent use of them. They make use of resources in order to aid them with their research and the writing of their class notes. Some examples of these resources are open access journals and free electronic books. The Open Educational Materials (ODERs) were beneficial to researchers because they provided them with simple and cost-free access to the high-quality resources and literature that they required to carry out their study. Inadequate power supply, a lack of retrieval skills, and insufficient information and communication technology facilities are some of the most prominent problems associated with the usage of ODERs.

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