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**OPEN EDUCATIONAL RESOURCES: PROSPECTS AND CHALLENGES TO ACADEMIC STAFF
IN TWO PRIVATE UNIVERSITIES IN DELTA STATE, NIGERIA**

By

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Abstract

Open educational resources (OER) are being utilised more often to support pedagogical objectives and learning requirements in higher education institutions all over the world. The OER: opportunities and difficulties for academic staff at private institutions in Delta State, Nigeria were the subject of this research. For this study, the descriptive research design was used. The goal of the research is to determine the extent of academic staff use of OERs, the reason for such usage, the advantages associated with that usage, and the obstacles that academic staff face in using OERs. The study's findings revealed that both institutions' academic staff members used open educational resources (OERs) extensively. Participants also used OERs to learn new things and find inspiration. Some advantages of employing OERs include making research work easily accessible and offering free internet access to books required for study. The usage of OERs was hindered by weak Internet infrastructure and an insufficient power supply. The report suggested, among other things, that tertiary institutions work to develop their own repository where done research might be uploaded. Students and academic staff would gain from it. Additionally, policymakers in Delta State must to think about launching a serious OER campaign at private institutions. This will increase accessibility and use by ensuring that both academic staff and students are aware of their presence.

Key Words: Challenges, opportunities, universities, prospects, challenges, open educational resources, research

Introduction

Open educational materials are essential tools for aiding teaching, learning, and research in universities all around the globe. These assets include textbooks, lecture notes, syllabus, course materials, software, assessment tools, simulation games, and any other pedagogical resources that are now accessible in digital form. Many academics and researchers have limited access to these high-quality informational resources. In many developing nations like Nigeria, in particular Delta State, where government financing for education is wholly insufficient, the situation is worse.

Ivwithreghweta and Onoriode (2012) noted that over the years, libraries all around the globe have unexpectedly faced a decrease in funding. However, subscription fees have been going up without a corresponding increase in library funding. Libraries in Nigeria can only afford to subscribe to a small number of inexpensive instructional items each year.

According to Mavodza (2013), the growing cost of subscriptions was essentially what sparked academic libraries' interest in OER. Given the price of hardcover books and other electronic information resources, OER has therefore gained more and more attention from university libraries.

The introduction of OER into higher education is advantageous since book prices are growing. However, since it has given students access to repositories from different educational institutions both locally and worldwide, OER is a researcher and scholar's dream come true (Njeze, 2020).

One of the factors bringing this technology academic patronage, particularly on OER sites, is the ocean of material available on the internet in a variety of forms with relatively easy access. It is defined as "the open provision of educational resources, enabled by ICT technologies, for consultation, use, and adaptation by a community of users for noncommercial purposes" (UNESCO, 2002, p. 24).

UNESCO uses this idea as a benchmark to raise the standard of education across the world by offering a place where people may study, teach, and do research.

OER is one method of distributing publicly available materials, claims Dutta (2016). The goal of OER is to make educational resources more affordable, to foster innovation, and to raise educational standards for everyone to access at anytime, anywhere.

OER, or openly-licensed, freely accessible educational resources, is a recent concept that refers to any form of educational resource, from syllabi to whole courses in this digital age (Islim, Koybasi, & Cagiltay, 2016).

OER are electronic repositories created by institution staff members that provide open online access to knowledge that is copyright and creative commons licenced. OER have been around for more than 10 years and help learning in several topic modules. They may be accessible via institutional portals.

The advent of OER has sparked interest among institutions of higher learning in Nigeria, particularly in Delta State, and has enabled the sharing of information across borders since they provide professors the flexibility to reuse content in a variety of forms while also making it accessible to students. For users who don't have a reliable internet connection, institutions now download these materials and make them accessible to them locally through intranet (McGreal, 2017).

Njeze (2020) (p. 12) states that in order to access OER easily, researchers from various higher education institutions must "develop ICT skills for easy access, possess ability to download, and preserve information, and be bound to have mobile learning device (laptop) with internet for easy access to information regardless of their location."

Literature Review

Prospects of open Educational Resources to Researchers

Open access to information will undoubtedly improve the availability of scientific publications and also lower costs. As a result of libraries' inability to provide information seekers with the anticipated academic publications they want, their value has significantly decreased in recent years (Ivwithreghweta 2012).

The advantages of OERs have been the subject of several research. According to study done in 2013 by Ogbomo and Ivwithreghweta, using open access boosts the effect of academics' work. This indicates that the researcher's papers are extensively referenced and utilised.

The benefits of using OERs by researchers were listed by Adeyokun, Adebowale, and Yaya (2015) and included unlimited access to educational resources, lower costs, improved ease of publication of intellectual works, increased global visibility and use of research findings, improved societal intellectual capacity building, and straightforward information dissemination.

According to the majority of professors and students surveyed in many studies, open educational resources (OER) are on par with or superior than commercial textbooks in terms of quality (Allen & Seaman, 2014; Watson, Domizi, & Clouser, 2017). Many students at tertiary institutions prefer adopting open educational resources (OER) instead of conventional textbooks (Petrides, Jimes, & Hedgspeth, 2012; Watson, Domizi, & Clouser, 2017), noting the advantages of cost, accessibility, and OER's characteristics. According to Allen & Seaman (2014), the majority of faculty members regarded open educational resources (OER) as being on par with or better than conventional resources in terms of cost (97.9%), effectiveness (84.6%), efficacy (91.2%), and trustworthy quality (73.6%).

According to Ogunbodede and Mohammad (2022), access to the archives of many educational institutions on a local and international level has made OER a reality for the majority of academics. By reducing geographic, economic, and demographic barriers to education, OER may support individualised learning and lifelong learning on a global scale.

The growth and usage of open educational resources (OER) have created a wide range of educational possibilities in compared to more conventional, proprietary publisher products.

According to studies by Ogbomo and Ivwighreghweta (2016) and Ivwighreghweta and Onoriode (2012), researchers use open educational resources (OERs) and profit from them since they can obtain the material they need for their study for free online.

Challenges of OERs

Numerous studies have shown a number of obstacles to using OERs for research and gaining access to them. OERs have evolved into indispensable instruments for education, research, and learning, but most academics and researchers are not taking full use of them since they are unaware of their availability, according to Ajegbomogun (2007).

Ivwithreghweta and Onoriode (2012) advocated for the implementation of additional awareness initiatives to enlighten lecturers and other information searchers about the numerous advantages associated with using open access materials as a way to finish their article. The authors stressed that researchers who use open access journals should make an effort to inform others about it in order to promote the open access movement. Similar to this, Obuh and Bozimo (2012) suggested in their research that efforts should be made to raise knowledge of the ideas, methods, and advantages of open access across academic groups.

A research by Madhunsudhan (2010) found that the adoption of OER was hindered by a lack of suitable IT skills, slow internet connectivity, and challenges obtaining essential information.

According to Ivwithreghweta and Onoriode's (2012) research, the lack of Internet connection and awareness of OER's existence, as well as delays in downloads, restricted access to computer terminals, and power outages, are obstacles to their use. Similarly, Ivwithreghweta and Igere, (2014); Ivwithreghweta, (2012); Ogbomo and Ivwithreghweta, (2013); Ivwithreghweta and Onoriode, (2012); Ivwithreghweta & Eireyi-Fidelis (2022), Ivwithreghweta & Efevberha-Ogodo (2023), Ivwithreghweta & Efevberha-Ogodo, O. (2023) and Ivwithreghweta and Smart (2020) stated that lack of reliable electricity and slow internet were the difficulties experienced by both librarians and users of the library when attempting to use OERs.

Orwenjo and Erastus (2018) listed some of the obstacles encountered in Kenyan secondary schools, including poor ICT infrastructure, a lack of administrative support, skill shortages, a lack of acceptable ICT competences, a lack of knowledge of OERs, and unfavourable attitudes.

Ivwithreghweta (2016) identified a number of issues that hindered the effective use of open access journals, including insufficient computers, insufficient advocacy, power outages, difficulty reading computer screens, insufficient internet skills to access open access journals, and lack of knowledge of their existence.

Adeyokun, Adebawale, and Yaya (2015) listed a number of obstacles preventing academics from using OERs, including a lack of awareness within the academic community, insufficient financing, technical difficulties, a shortage of trained labour, and technological difficulties.

Slow internet connections, erratic power supplies, subpar computers, a lack of online access, a lack of technical know-how, and a lack of e-resources were all identified by Ivwighreghweta and Oyeniran's (2013) studies as major obstacles to the effective use of OERs in the chosen universities studied.

The usage of e-resources was considerably hindered by slow internet connection (59.8%), intermittent power supply (47.8%), and lack of online access (42.4%), according to Olorongbe and Ibrahim's 2011 study. Similar limitations include a lack of technical expertise, a distaste of reading from a screen, and a lack of knowledge of e-resources, which often impact how often people utilise them. In order to better understand the opportunities and obstacles facing academic staff at private institutions in Delta State, Nigeria, this research examined free educational materials.

Purpose of the Study

The purpose of this study is to investigate open educational resources: prospects and challenges to academic staff in private universities in Delta State, Nigeria. The specific objective of the study is to:

- i. identify the level of usage of OERs by academic staff at Delta State;
- ii. pinpoint the motivation behind the use of OERs by the academic staff;
- iii. calculate the benefits derived from the use of OERs by the academic staff;
- iv. pinpoint the obstacles standing in the way of the academic staff's use of OERs;

Research Questions

The following research questions were put forward to direct this investigation:

- i. How much of Delta State's academic staff uses OERs for learning?
- ii. What are the objectives of the academic staff's use of OERs?
- iii. What are the advantages of academic personnel using OERs, specifically?
- iv. What obstacles prevent academic personnel from using open educational resources?

Method

A descriptive survey approach was employed for this investigation. 240 academic staff members from Western Delta University Oghara and the Michael and Cecilia Ibru University in Agbarha-Otor, Delta State, Nigeria, make up the study's population. A self-made questionnaire known as the OERQ served as the research method for this study. 195 of the two hundred and forty (240) questionnaires that were delivered were judged to be usable. The research used

the complete enumerative and accidental sampling strategy. The tool for gathering data was a questionnaire. The data were analysed using the mean, frequency, and percentage statistics.

Questionnaire Response Rate

Table 1: Questionnaire Response Rate

Number of Questionnaire Administered	Number of Questionnaire Returned
240	195

A total of 240 survey packets were distributed, and 195 (81%) of them were returned. The study's response rate of 81% is judged adequate given that the typical and acceptable response rate for most research is 60% (Dulle, Minish-Majanja, & Cloete, 2010).

Findings

The following tables with explanations describe the study's results.

Table 2: Name of Institution of the Respondents

Institution	Frequency	Percentage %
Western Delta University, Oghara, Delta State	96	49.3
Michael and Cecilia Ibru University, Agbarha-Otor, Delta State	99	50.7

Table 2 shows that there were 99 (50.7%) academic staff in Michael and Cecilia Ibru University, Agbarha-Otor, and 96 (49.3%) of them were from Western Delta University, Oghara, Delta State. This means that there were more academic staff in Michael and Cecilia Ibru University, Agbarha-Otor, Delta State.

Distribution of the Participants by Rank

Table 2: Distribution of the Participants by Rank

Rank of Librarians	Frequency	Percentage %
Assistant lecturers	20	10
Lecturer 11	32	16
Lecturer 1	71	36
Senior lecturers	39	20
Readers	15	8
Professors	18	9

Table 2 shows that the academic staff that partook in the study are Assistant Lecturers 20 (10%), Lecturer 11, 32 (16%), lecturer 1, 71 (36%), Senior Lecturers, 39 (20%), Readers, 15 (8%) and Professors, 18 (9%). This implies that Lecturer I, had the highest number of involvement in this study.

Table 3: Academic Qualification

Qualifications	Frequency	Percentage %
Ph.D	83	43
Masters	92	47
Bachelors	20	10

Table 3 shows that majority 92 (47%) of the Lecturers possess Master’s degrees. This was followed by 83 (43%) who have Ph. D degrees.

Table 4: Distribution of the Participants by Years of Working Experience

Years	Frequency	Percentage %
Less than 10 years	39	20
10-15 years	85	44
16-20 years	46	24
Above 20 years	25	12

Table 4 shows that majority 85 (44%) of the Lecturers had 10-15 years’ experience. This was followed by 46 (24%) who has between 16-20 years of experience.

Research Question 1: What is the level of usage of use of open educational resources by academic staff in Delta State?

Table 5: Level of Usage of OERs

Usage	Mean
I download OER materials for learning and research purposes	3.06
OER enable me to prepare for my tests and exams	2.89
I make use OERs to supplement my learning	3.00
I make use of National Open University Open Educational Resource to supplement my learning process	2.86
Google scholar resources helps to enrich my research reports	2.70
I use Slideshare for learning purposes	2.74
The use of OER help me to learn from other learned scholars	2.82
OER enables me to get access to quality materials	2.90
I make use of OER for other purposes	2.52
Grand Mean	2.82

Table 5 indicates that the mean of academic staff of both universities based on the level OER usage. The results show that, with an aggregate mean of 2.82 which is higher than the criterion mean of 2.50, it can be concluded that the academic staff in both universities had high level of usage OERs.

Research Question Two: What are the purpose for the usage of OERs by the academic staff?

Table 6: Purpose of using OERs

Purpose	Frequency	Percentage %
Teaching	45	23
acquire new knowledge and inspiration	32	16
To evaluate my instructional materials' quality by contrasting them with theirs	29	15
to expand my teaching methods	21	11
To make my instruction more culturally diverse or responsive	12	6
to promote my professional growth	15	8
stay up with a subject or problem	19	10
study a new subject	17	8
learn a new topic connect with teachers or students who are interested in the same things you are (for instance, by reading the comments they have left on resources)	5	3

Table 6 shows the reasons academic staff make use of OERs. The results that majority 45 (23%) of the respondents use OERs for teaching. This was followed by 32 (16%) who use it for getting new ideas and inspiration.

Research Question 3: What are the benefits derived from the use of OERs by the academic staff?

Table 7: Benefits of using OERs

Benefits of OERs	SA	A	D	SD
The research work is easily accessible because to OERs.	96 (49%)	55(28%)	24(12%)	20(10%)
Free online access to the books required for my study is made available via OERs.	82(42%)	49(25%)	30(15%)	34(17%)
OERs helps in career development.	76(39%)	51(26%)	43(22%)	25(13%)
OAJ increases the number of citations for academic publications.	71(36%)	48(25%)	25(13%)	51(26%)
Timely access to information	65(33%)	65(33%)	42(22%)	23(12%)

Increased web ranking	56(29%)	63(32%)	3(1%)	70(37%)
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Table 7 shows the benefits of using OERs. Majority 96 (49%) and 55(28%) agreed that OERs makes for easy accessibility of the research work. This was followed by 82(42%) and 49(25%) who stated that OERs provides free online access to the literature necessary for their research, 76(39%) and 51(26%) specified that OERs helps them in their career development.

Research Question four: What are the challenges militating against the use of OERs by the academic staff?

Table 8: Challenges of OERs

Challenges of OERs	SA	A	D	SD
Research articles are low quality	25(13%)	5(3%)	89(46%)	76(38%)
Research content can easily be plagiarized	102(52%)	32(16%)	52(27%)	9(5%)
Inadequate power supply	94(48%)	85(44%)	6(3%)	10(5%)
poor Internet	98(50%)	67(34%)	25(13%)	5(3%)
Inadequate ICT infrastructure	78(40%)	86(44%)	13(7%)	18(9%)
Timely access to information	65(33%)	68(35%)	6(3%)	56(29%)
Lack of knowledge of OERs	91(47%)	24(12%)	42(22%)	38(19%)
No financial compensation for writers	69(35%)	83(43%)	32(16%)	11(6%)
No tangible copies of open access content are available	73(37%)	47(24%)	37(19%)	38(19%)

Table 8 shows the challenges militating against OERs. Majority 94(48%) and 85(44%) identified inadequate power supply. Poor Internet facilities were mentioned next by 98 (50%) and 67 (34%) respondents, respectively.

Discussion of Findings

The survey found unequivocally that the academic staff at both institutions used OERs at a high rate. This suggests that OERs have raised the standard of education internationally by offering a source for public learning, teaching, and research. This research supports Ivwighreghweta's (2013) findings, which indicated that using open access has increased the effect of researchers' work.

The findings indicate that the majority of participants used OERs for teaching as well as for obtaining fresh perspectives and motivation. This outcome is in line with Njeze's (2020) claim that the introduction of open educational resources (OER) into the higher education system is advantageous due to the rising cost of books, but OER is also a dream come true for researchers because it has granted them access to the repositories of numerous institutions of higher learning both domestically and abroad.

The majority of the academic staff at both institutions agreed that OERs make research work easily accessible and provide free online access to the material they need for their studies. These results are consistent with Ivwighreghweta and Onoriode's (2012) study, which found that respondents have mentioned open OERs and that using them results in free online access to the literature required for research.

The respondents cited weak Internet capabilities and insufficient power supply as factors working against academic personnel using OERs. Ineffective use of OERs at the selected institutions was reportedly hampered by sluggish internet services, inconsistent power supply, inferior computers, a lack of online access, a lack of technological know-how, and a shortage of e-resources, according to Ivwighreghweta and Oyeniran's (2013) findings. This study supports those findings.

Recommendations

The study's recommendations were as follows:

- i. Tertiary institutions should endeavour to create their own repository where conducted researches within the institutions can be uploaded. Academic staff and Students would benefit from it.
- ii. Policy makers should consider a severe campaign of OERs in private institutions in Delta State. This will help ensure that both academic staff and students are aware of their existences thereby increasing the accessibility and utilization.
- iii. Academic libraries should aggressively promote the usage of OER via awareness campaigns and other means. Teaching, learning, and research will all benefit from this.

Conclusion

Academic staff at private universities in Delta State now have access to top-notch learning materials at the most affordable prices thanks to OERs. According to the survey, academic staff members often utilise open educational resources (OERs) for both teaching and for finding fresh perspectives and motivation. Some advantages they received from their usage were easy access to research resources and the availability of free internet reading material. However, poor Internet accessibility and insufficient power supply were barriers that prevented academic personnel from using OERs.

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