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Chinda Anthony
Department of Curriculum
Studies and Educational
Technology Faculty of
Education University of Port
Harcourt, Nigeria

Awotua-Efebo Ebi Bio
Professor, Department of
Curriculum Studies and
Educational Technology
Faculty of Education
University of Port Harcourt,
Nigeria

Baribor Vikoo
Professor, Department of
Curriculum Studies and
Educational Technology
Faculty of Education
University of Port Harcourt,
Nigeria

Correspondence
Chinda Anthony
Department of Curriculum
Studies and Educational
Technology Faculty of
Education University of Port
Harcourt, Nigeria

Lecturers perception of open educational resources (OERs) for academic purposes

Chinda Anthony, Awotua-Efebo Ebi Bio and Baribor Vikoo

Abstract

Globally, the impact of technology and its integration in teaching and learning has influenced the delivery of education. The advancement of information and communication technologies, in view to knowledge sharing, led to the birth of Open Educational Resources (OERs). This study was thus aimed at investigating the 'Lecturers Perception of on Open Educational Resources (OERs) for Academic Purposes. Three (3) research questions and three (3) hypotheses guided the study. All lecturers' in Faculty of Education, University of Port Harcourt made up the population for this study, with a total of 150 as samples size. A 4-point Likert scale instrument for data collection was administered, titled Perception of lecturers on the use of Open Educational Resources (LPOERs). It contained three sections measuring several variables such as graduate students' awareness level, the extent of usage of OERs and challenges they experience with the use of OERs. The face and content validity of the instrument was established, and the test-retest method was used to determine the reliability of the instrument, with a reliability coefficient of 0.77 obtained. The researcher and three research assistants collected data. Mean and the standard deviation was used to answer the research questions, while the hypotheses were analyzed using Z-test. Some of the findings revealed that the level of awareness among lecturers on OERs and their skill for evaluating web-based information is very low. However, it was recommended that an awareness should be developed for lecturers on how to access OERs and evaluate any information derived from the internet, and necessary facilities should be put in place.

Keywords: Web, open courses, modules, study guide

Introduction

Openness suggests flexibility and easy access to information and data. The OER concept further includes the availability of educational materials over the Internet, repurposing content to meet individual needs and having appropriate technical and support infrastructure. This empowers educators to design and distribute individualized learning materials for learners to access and use at their own time and pace.

It is therefore important that educators understand how OERs have impacted on teaching and learning. One way to understand the impact of OERs in education is to look at the overall provision of education. Along these lines, Conole (2012) ^[2], states that understanding the value of OER "can be used to support inclusion" Inclusion is a mandate of UNESCO as stated in the Millennium Development Goals "not to leave any child (person) out of the education scene". In that vein, Caswell (2008) ^[1], argue that OER promotes universal education as it allows access to more learners. Not only do OERs support lifelong education; they have the potential to attract a wider audience. In addition, it has been observed that OER content may lead to high-quality products as creators of content open up their materials to be used by others. These views present a strong argument that OER has a potential not only to close the digital divide but also to increase access and improve quality of education (Gourley & Lane 2009) ^[3]. Therefore, the importance of integrating OER in education cannot be overemphasized. The term was introduced by UNESCO (2002) ^[6], which defined OER as the technology-enabled, open provisions of educational resources for consultation, use and adoption by a community of users for non-commercial purposes.

In 1948 the United Nations declared that everyone has a right to education stating that "technical and professional education shall be made generally available" (Article 26, United Nations Declaration of Human Rights 1948).

This declaration has led to initiatives where educators and researchers have searched for ways to make education more open, free and accessible. New technologies such as OERs and Open Courseware, play a major role in making this vision achievable (Caswell *et al.* 2008) [1]. It should be noted that the idea of access and openness did not start with the advent of Open Educational Resources.

The free and open sharing of educational resources is essential for promoting the building of ubiquitous learning networks as well as reducing the knowledge divide that separates and partitions societies. Educators worldwide continue to face significant challenges related to providing increased access to high-quality learning while containing or reducing costs. New developments in information technology highlight the shortcomings and challenges of the traditional education community, as well as those of more flexible providers such as open universities. Such developments, including accessible repositories, Internet access, wireless network and mobile devices, have the potential to increase access and flexibility in education by rendering it ubiquitous. Basic education for all continues to be a goal that challenges and will continue to challenge many countries. OER can be used to overcome many of the obstacles faced by both learners and educators.

In its simplest form, the concept of Open Educational Resources (OERs) describes any educational resources (including curriculum maps, course materials, textbooks, streaming videos, multimedia applications, podcasts, and any other materials that have been designed for use in teaching and learning) that are openly available for use by educators and students, without an accompanying need to pay royalties or license fees.

OER has emerged as a concept with great potential to support educational transformation. While its educational value lies in the idea of using resources as an integral method of communication of curriculum in educational courses (i.e. resources-based learning), its transformative power lies in the ease with which such resources, when digitized, can be shared via the Internet. Importantly, there is only one key differentiator between an OER and any other educational resources: its license. Thus, an OER is simply an educational resource that incorporates a license that facilitates reuse, and potentially adaptation, without first requesting permission from the copyright holder.

Source: The Open society institute and the shuttle worth foundation 2007.

The concept of “Openness” is based on the idea that knowledge should be disseminated and shared freely through the Internet for the benefit of society as a whole. The two most important aspects of openness are free availability and as few restrictions as possible on the use of the resource, whether technical, legal or price barriers. Openness exists in different 2 forms and domains and has different meanings in different contexts. For example, in the social domain, it is fundamentally motivated by the expected social benefits and by ethical considerations related to freedom to use, contribute and share. Openness in the technical domain is characterized by access to source code and/or access to interoperability standards or the standards process.

Inspired by the success of Open Sources Initiative (OSI), David Wiley founded “Open Content Project” in 1998 (Wiley 2003) to popularize the principle of OSI for creating and reusing learning objectives and content. The first content-

specific license was created for educational materials and a key fundamental of Wiley’s original license is that any object is freely available for modification, use and redistribution with certain restrictions. Open Access Initiatives. <http://www.pubmedcentral.nih.gov/about/openaccess.html>.

The idea of Open Access is that scholarly work should be freely and openly available online with no unnecessary licensing, copyright, or subscription restrictions. Three key initiatives serve as milestones for the open access movement. In December 2001, the Open Society Institute organized a meeting in Budapest and the outcome of these 3 meetings was the Budapest Open Access Initiative (BOAI). The Budapest Initiatives announced two strategies for open access-the establishment of open access journals and self-archiving by scholars of their work. In April 2003, a meeting at the Howard Hughes Medical Institute in Maryland resulted in the Bethesda Statement on Open Access Publishing-free access to scholarly journals. It provided a working definition of open access publishing and agreed on a set of principles that all parties (scholars, research institutions, publishers and librarians) could adapt to ‘promote the rapid and efficient transition to open access publishing’.

Source: <http://ocw.rmit.edu/index.htm>.

Statement of Problem

Ordinarily, academics ought to explore the numerous benefits of accessible educational resources to their advantage in their quest for professional, personal development and career enhancement. Why do we still experience failure in our educational system when resources that should enhance and promote lecturers’ activities abound and in unlimited dimension, could be lack of knowledge or awareness on the part of the academics or the potentials of OERs be responsible or the naivety on their application or utilization? These, amongst others, remain the thrust of this timely investigation.

Aim and Objectives of the Study

The main aim of this study is to ascertain the extent to which lecturers’ in University of Port Harcourt perceive the use Open Educational Resources (OERs). In specific terms, the study sought to:

1. Access the benefits of OERs to lecturers’ and to the University based on their perception.
2. Find out the extent to which male and female lecturers possess the skills for internet usage.
3. Identify the possible challenges that can hinder effective use of OER based on the perception of male and female lecturers’.

Research Questions

The following research questions guided this study:

1. What are the benefits of OERs to male and female lecturers based on their perception?
2. To what extent do male and female lecturers possess the skills for internet usage?
3. How do male and female lecturers perceive the possible challenges that can hinder effective use of OERs for their research works?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant difference in the mean ratings of male and female lecturers on the awareness level of OERs.
2. There is no significant difference that exists between male and female lecturers' possession of internet skills for use of OERs.
3. The perception of male and female lecturers on the evaluation of web-based information for OERs is not significantly different.

Methodology

Research Design

A descriptive survey design was used in conducting the study. The opinion of lecturers in Faculty of Education was sought in the items contained in the instrument.

Population

All the lecturers in the Faculty of Education in the University of Port Harcourt constituted the population sample.

Sample Size

A total of one hundred and fifty (150) lecturers in the Faculty of Education constituted the sample size of the study.

Instrument

A 4-point Likert-like questionnaire housed in three sections was used for the study. It is obvious that each of the sections, A, B and C focused on the related research question. The instrument was labelled "Perception of lecturers in the use of Open Educational Resources" (PGOERs), an 82-item questionnaire. The ratings are as shown on the tables on the discussion of findings.

Validity

To ensure that the items have to bear with the research questions, trusted peers and researchers did the vetting. In the process of doing that, weak or detractor items were expunged and only relevant ones were retained.

Reliability

A simple test-retest reliability technique was adopted with a two-week interval. This gave a reliability coefficient value of 0.77, which is close to nil, an indication, that the instrument was valid.

Data collection/Analysis

Face to face administration of the questionnaire was carried with the aid of three research assistants. The administration and retrieval of instrument lasted for two weeks. However, the analysis was achieved using mean, standard deviation and z-scores as seen in the tables listed below.

Discussion of Findings

This section deals with the result obtained from the data analyses that was done after the collection of data. The tables for the research questions were presented first before those of the hypotheses. Next is the analyses of tables and finally the discussion of findings.

Presentation of Data

Research Question One: What are the benefits of OERs to male and female lecturers based on their perception?

Table 1: Mean and standard deviation of male and female lecturer's perception of benefits of OERs

S/N	ITEM	X Male N=80		Female N=70 X SD		Mean	Decision
		\bar{X}	SD	\bar{X}	SD		
1.	OERs can provide freedom of access for both myself and my colleagues	2.87	0.97	2.72	0.81	2.79	Disagree
2.	They bring down the cost of materials to staff since they are provided free of charge	2.97	0.93	3.10	0.83	3.04	Strongly Agree
3.	They help staff to Contribute to education globally.	2.91	0.87	3.04	1.00	2.98	Agreed
4.	They increasingly enhance innovative teaching in all subjects	2.69	1.05	2.78	0.84	2.97	Agreed
5.	There are very useful to future researchers	2.93	1.05	2.75	0.89	3.09	Strongly Agreed
6.	OERs are very beneficial in collaborating with other staff on academic matters across the globe	2.78	0.87	2.85	0.96	2.81	Agreed
7.	OER help to provide access to videotaped lectures uploaded to the internet	2.53	1.10	2.81	1.03	2.67	Agreed
8.	OER helps to promote knowledge creation, sharing and dissemination of knowledge	2.91	1.08	2.79	1.08	2.85	Agreed
	Grand Mean	2.82	0.90	2.85	0.79	2.90	Agreed

Research Question Two: To what extent do male and female lecturers possess the skills for internet usage?

Table 2: The Mean extent of lecturers' internet literacy skills

S/N	Internet Literacy Skill	Male Mean (X)	Extent	Female Mean (X)	Extent
1.	I can log on to the internet without help from anyone	3.66	VHE	3.81	VHE
2.	I can browse for information on the internet all by myself	3.48	VHE	3.74	VHE
3.	I can use other search engines other than Google to search for information from the Internet	3.21	VHE	3.31	VHE
4.	I can download materials from the internet	2.76	HE	2.76	HE
5.	I can upload information	2.65	HE	2.58	HE
6.	I can save information I got from the internet into a storage device	3.05	VHE	3.12	VHE
7.	I can retrieve information without anyone's help	2.68	HE	2.64	HE
8.	I own a social media account such as Facebook	3.65	VHE	3.81	VHE
9.	I can check my Facebook page or other social networks	3.68	VHE	3.67	VHE
10.	I can check my Facebook or other social media page from my smartphone	3.42	VHE	3.39	VHE
11.	I can post status updates on my social media account	3.20	VHE	3.31	VHE
12.	I can post photos on my social media account without any help	3.47	VHE	3.51	VHE
13.	I can browse profiles and photos	3.58	VHE	3.81	VHE
14.	I can read the posting	3.02	VHE	3.14	VHE
15.	I can read email on a mobile phone	3.05	VHE	3.20	VHE
16.	I get directions or use GPS on a mobile phone	2.79	HE	2.67	HE
17.	I can browse the web on my mobile phone	3.56	VHE	3.08	VHE
18.	I can check the news on the internet	2.67	HE	2.60	HE
19.	I can record video from the internet on my mobile phone	2.00	LE	2.05	LE
20.	I can check the news on the internet	3.15	VHE	3.10	VHE
21.	I can search for information with a mobile phone	3.41	VHE	3.33	VHE
22.	I watch Tv shows, movies on a computer	2.95	HE	3.00	VHE
23.	I watch video clips on a computer	2.20	HE	2.32	VHE
24.	Send, receive and read emails including spam or junk mail	2.75	HE	2.62	HE
25.	I can check my personal email	2.62	HE	2.75	HE
26.	I can check my work or school email	2.91	HE	2.85	HE
27.	I attach and send files via email	2.34	HE	2.41	HE
28.	I receive and open attached files via email	2.34	HE	2.34	HE
	Grand Mean	3.02	VHE	3.14	VHE

Research Question Three: How do male and female lecturers perceive the possible challenges that can hinder effective use of OERs for their research works?

Table 3: Mean and standard deviation of male and female lecturer's perception of challenges against effective OERs usage

S/N	ITEM	X Male N=80		Female N=70 SD		Mean	Decision
		X	SD	X	SD		
1.	I don't know how to use the computer	1.23	0.84	1.87	0.94	1.55	Disagree
2.	I can't navigate on the internet	1.25	0.81	1.43	0.91	1.34	Disagree
3.	Lack of the awareness of the existence of OERs	3.13	0.98	3.03	0.94	3.08	Strongly Agreed
4.	Lack of internet connectivity	3.28	0.86	2.84	1.11	3.06	Agreed
5.	I do not own a mobile device that can give me	3.31	0.87	2.98	1.03	3.15	Strongly Agreed
6.	The high cost of purchasing data for my mobile device	2.94	1.02	3.02	1.02	2.98	Agreed
7.	I am not interested in using the internet	1.86	1.06	1.53	1.07	1.69	Strongly Disagree
8.	Lack of steady power supply	3.30	0.84	2.89	1.09	3.10	Strongly Agreed
9.	High cost of technological Facilities	3.25	0.92	2.94	0.93	3.09	Strongly Agree
10.	I don't know how to get to OER websites	3.15	0.78	3.18	0.91	3.16	Strongly Agree
	Grand Mean	2.68	0.89	2.57	0.99	2.62	Strongly Agreed

Hypotheses

Hypothesis One: There is no significant difference in the mean rating of male and female lecturers on the awareness level of OERs.

Table 4: Z-test of mean rating of male and female lecturers' awareness level of OERs

Gender	N	Mean	SD	Df	Z-Cal	Z-Crit	Decision
Male	80	3.19	0.89	148	0.57	1.98	Retain
Female	70	3.11	0.83				HO ₁

Hypothesis Two: The mean ratings of male and female lecturers on their possession of skills for searching the internet for information on OERs do not differ significantly.

Table 5: Z-test of mean rating of male and female lecturers' skills for searching OERs information

Gender	N	Mean	SD	Df	Z-Cal	Z-Crit	Decision
Male	80	3.14	0.96	148	0.77	1.98	Retain
Female	70	3.02	0.92				HO ₁

Hypothesis Three: The mean ratings of male and female lecturers for evaluating web-based information on the

possible challenges that can hinder their usage of OERs based on their perception will not significantly differ.

Table 6: Z-test of mean rating of male and female lecturers' perception of challenges hindering effective usage of OERs

Gender	N	Mean	SD	Df	Z-Cal	Z-Crit	Decision
Male	80	2.68	0.89	148	0.38	1.98	Retain
Female	70	2.62	0.99				HO ₁

Data Analyses

The result of the data analysis presented in Table 1 regarding the perception of male and female lecturers on the benefits of OERs in their educational activities revealed that male lecturers had a mean of 2.82, while female lecturers had a mean of 2.85. This value indicates that male and female lecturers agreed that OERs is beneficial to them for their educational activities. On a general basis, the result yielded a mean value of 2.90 indicating that lecturers generally agree that OERs are beneficial for their educational development.

The analysis done in table 2 indicates that when the various skills for computer internet usage for male and female lecturers were computed, male lecturers obtained a grand mean of 3.02 while female lecturers obtained a grand mean of 3.14. From the mean values obtained by male and female lecturers, it is obvious that the two groups of lecturers possessed the skill for internet usage to a very high extent.

The data presented in table 3 indicates that male (mean = 1.23) and female (mean = 1.87) lecturers disagreed that poor knowledge of computer operations is not a challenge hindering their effective usage of OERs (mean = 1.55). They also disagreed that inability to navigate internet is not a factor hindering their usage of OERs (mean = 1.34), as well as disagreed to the statement that lack of interest is a factor hindering their effective usage of OERs (mean = 1.69). On the other hand, it was revealed that lack of awareness on the existence of OERs (3.08), lack of strong internet connectivity (3.06), lack of good mobile device to access internet (3.15), high cost of purchasing data for mobile internet (2.98), lack of steady power supply (3.10), high cost of technological facilities (3.09) and lack of knowledge on getting access to OERs were significant factors limiting effective utilization of OERs by lecturers for their research works.

The result from the data analysis done in table 4 indicates that when the mean rating of male and female lecturers on their awareness level of OERs was computed using independent samples Z-test, a calculated Z-value of 0.57 was obtained which was lesser than the tabulated Z-value of 1.98. Therefore, the result indicates that there is no significant difference in the awareness of OERs among male and female lecturers.

The result from the data analysis done in table 5 indicates that when the mean rating of male and female lecturers on the skills possessed in searching for information on the internet related to OERs was computed using independent samples Z-test, a calculated Z-value of 0.77 was obtained which was lesser than the tabulated Z-value of 1.98. Therefore, the result indicates that there is no significant difference in the rating of male and female lecturers in the skills possessed for searching information on the internet related to OERs.

The result from the data analysis done in table 6 indicates that when the mean rating of male and female lecturers on the possible challenges that can hinder their use of OERs was computed using independent samples Z-test, a calculated Z-value of 0.38 was obtained which was lesser than the tabulated Z-value of 1.98. Therefore, the result indicates that there is no significant difference in the rating of male and female lecturers on the possible challenges that can hinder their usage of OERs for their research work.

The major findings obtained after the analyses of data are briefly summarized below

1. Both male and female lecturers reported and agreed that OERs can be very beneficial to their research work at the University of Port Harcourt.
2. Lecturers reported that they possessed the skill for accessing the internet to a very high extent.

Factors such as lack of awareness of available OERs, poor electricity supply, the high cost of technological facilities and lack of internet connectivity were some constraints against effective usage of OERs by lecturers.

Conclusion

We can make a conclusion from the findings that it is imperative for lecturers' to be aware of the role OERs play in an academic environment, its benefits and its uses for academic purposes. There is a very low awareness level about Open Educational Resources among lecturers in the Faculty of Education, University of Port Harcourt and their skill for evaluating web-based information is very low. This is a cause for concern because even if they start using OERs, they would need to verify the information they get from the web. The Faculty has to play a major role to enhance the development of lecturers' information literacy skills and needed skills to evaluate web-based information. However, lecturers consider the use of OERs as highly beneficial, it becomes imperative that an awareness should be developed in them on how to access OERs and evaluate any information derived from these resources, putting the necessary facilities in place.

References

1. Caswell T, Henson S, Jensen M, Wiley D. Open Educational Resources: Enabling universal education. *International Review in Open and Distance Learning*. Accessed from, 2008, 9(1). <http://www.irrodi.org/index.php/irrodl/article/view/469/1001>
2. Conole G. Fostering social inclusion through Open Educational Resources (OER). *Distance Education*. 2012; 32(2):131-134.

- Available at: <http://www.dx.doi.org/10.1080/101587919.2012.700563>.
3. Gourley B, Lane A. Re-invigorating openness at the Open University: The role of Open Educational Resources. *Open learning. The Journal of Open and Distance Learning*. 2009; 24(1):57-65.
unesco.org/images/e/ea/eaer_forum_report.pdf
 4. Hodgkinson WC, Paskevicius M. The role of postgraduate students in co-authoring open educational resources to promote social inclusion: A case study at the University of Cape Town. *Distance Education*. 2012; 33(2):253-269.
Doi: 10.1080/01587919.2012.692052.
 5. Unesco Col. UNESCO/COL Guidelines for Open Educational Resources (OER!) in Higher Education. Retrieved from, 2011.
<http://unesdoc.unesco.org/images/0021/002138/213605e.pdf>
 6. UNESCO. Forum on the Impact of Open Courseware for Higher Education in Developing Countries. Retrieved from, 2002.
<http://unesdoc.unesco.org/images/0012/001285/128515e.pdf>
 7. United Nation Declaration of Human Rights. Universal Declaration of Human Rights-Article 26. United Nations. Retrieved 10th February, 1984, 2017.
From <http://www.un.org/en/universal-declaration-human-rights/>
 8. Wiley D. Open Education Resources (OER). Online available on Open content. Org Retrieved 10/06/2013, 1998.