
**AN ASSESSMENT OF THE LEVEL OF AWARENESS AND USE OF
OPEN EDUCATION RESOURCES BY LECTURERS AND STUDENTS
IN A NIGERIAN UNIVERSITY**

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Abstract

This study focused on the level of awareness and use of Open Education Resources by lecturers and students in a Nigerian University. Open Education Resources are materials such as course contents, course materials, textbooks and projects which are available in the net for use by people. However, many lecturers/teachers and students seem not to be aware of them. The study was a descriptive survey and the sample for the study consisted of 52 respondents comprising twenty one(21) 400 level undergraduate students, 17 Postgraduate Diploma in Education Students and 15 lecturers of different ranks. A questionnaire titled " Open Education Resources Questionnaire" was used to collect data from the respondents. The result of the study showed that while lecturers and postgraduate Diploma students make use of Open Education Resources more than undergraduate students, there are still lecturers and students who are ignorant of the use of these resources. It was recommended that the school authority should assist both lecturers and students to acquire laptops at subsidized rates so that they will have increased access to Open Education Resources.

Tertiary education, which is the highest level of education, contributes immensely to the achievement of sustainable development in any society. This is because it does not only focus on the transfer of knowledge, but encourages the discovery of new knowledge through research. Emenalo (2011) emphasizes more on the importance of higher education by stating that it is seen as the largest repository of certified knowledge, where the highest concentration of certified experts in different fields of study required for the advancement and development of the society are engaged.

The National Policy on Education also stipulated the broad goals of Tertiary Education in Nigeria as:

- a. contributing to national development through high level relevant manpower training
- b. developing and inculcating proper values for the survival of the individual and the society
- c. developing the intellectual capacity of individuals to understand and appreciate their local and external environment
- d. giving both physical and intellectual skills, so as to be self- reliant and useful members of the society
- e. promoting and encouraging scholarship and community service
- f. forging and cementing national unity and,
- g. promoting national and international understating and interaction. F.R.N. (2004:P.30)

Higher educational institutions are therefore saddled with the responsibility of producing new knowledge through research and other mechanisms and conducting the transfer, adaptation and sharing of knowledge generated within the institution or elsewhere (Uzoigwe, 2011). In other to achieve the goals of tertiary education, teaching, research and community service which Obanya, (2008, cited in Frank-Oputu2014), termed knowledge transmission, knowledge generation and knowledge application or responsive social engagement respectively, must be essential components of tertiary education.

However, as important as tertiary education is, these goals cannot be achieved in the absence of certified experts who are well equipped with current knowledge, information, both in their areas of specialization as well as in pedagogical processes of teaching. Lecturers are therefore expected to always update their knowledge in other to be more efficient in their work and also move with the trend of globalization in the society. Field (2011) thus stated that education professionals are always learning, finding out things, analyzing information, adapting their behavior according to information received, looking for improvement and adapting to modern demands. Students who are being trained as future high level manpower for the society also need

to be abreast of current outlets for the acquisition and improvement of knowledge and also promotion of international understanding and interaction.

Information and Communication Technology (ICT) as opined by Augustine and Akpan (2014) has left no choice to the educational sector, especially in the areas of teaching and learning than to dance to the tune piped by recent technological trends. There is a massive explosion in information in the 21st century and ICT has made provisions to help teachers and students at all levels of education to cope with this challenge. A teacher who wishes to use technology in teaching should therefore among other things be willing to learn alongside the students. This is because technology application to learning is a rapidly changing process and the teacher should also be willing to take risks and face challenges including those posed by the learners (Onyefulu, 2011).

Literature Review

Many digital innovations have emerged through Information and Communication Technology (ICT). Online education, training and different forms of teaching and learning programmes take place via the internet. Rugai (2010) noted that the emergence of ICT and its widespread integration within schools around the world have had a deep and irreversible influence on all aspects of education. He further explained that it was the realization of this fact that made the developed nations of the world (coordinated by the United Nations through the Millennium Development Goals (MDGs) and the UNESCO Education for all (EFA) at the World Summit for the Information Society (WSIS) and Literary Decade Initiatives (2006) to set a high priority on the improvement of education worldwide with ICT competence as the main value of its achievement.

Buseni, (2013) also stated that the world presently is knowledge driven and information age has taken the centre stage in virtually everything. Internet technology is therefore used to facilitate resource provision and communication. The development of ICTs has brought about a major shift in the world. The information age is a contemporary meta-narrative that guides many studies in all fields. As a theoretical space within which to conduct contemporary research, the information age suggests that we are moving beyond the industrial age into an era where the sharing of knowledge and ideas is the new driver of power and the world economy (Austin and Anderson, 2008).

This sharing of knowledge and ideas is made possible through the availability of Open Education Resources in the internet. Open Education Resources (OER) are teaching, learning and research resources released under an open license that permits their free use and repurposing by others. They include full courses, course materials, lesson plans, open textbooks, learning objects, videos, games, tests, soft -ware or any other tool, material or technique that supports access to knowledge.(Astorga, n.d.) Five important features of OER as categorized by Astorga, (n.d.) are

- (i) **Retain:** Users have the right to make, achieve and own copies of the context
- (ii) **Reuse:** the contexts of OER can be reused in an unaltered form.
- (iii) **Revise:** the content can be adapted, adjusted, modified or altered
- (iv) **Remix:** the original or revised context can be combined with other contents to create something new
- (v) **Redistribute:** copies of the content can be shared with others in its original, revised or remixed form.

He also identified four main categories of OER movement as:

- (a) Open Course Ware (OCW)- these are digital publications of high quality educational materials that are freely and openly licensed and are available online to anyone, anytime. Examples are course planning and evaluation tools along with thematic content.
- (b) OER Publishers- There is a new open publishing effort for textbooks and other OER. This helps to cope with the high cost and demand for textbooks. It also includes initiatives for developing specific collections of OER for example, Khan Academy and the Saylor Foundation.
- (c) OER Repositories- This is a place to find, share and remix OER from a variety of sources.
- (d) Publicly funded initiatives-Policy makers at the local, state and national levels, are developing policies that encourage the creation and adoption of OER for instance, they directly fund the creation of OER and also ensure that any education resource produced as a result of the research is made openly accessible.

Open Education Resources (available in the internet) enables teachers to teach, learn and develop knowledge faster and on a wider scale. They can also share knowledge with students in another country or continent as easily as they can with their own students in the classroom. Moreover, students/learners can find information virtually on any topic, be able to connect to their peers across the globe and learn from them. Books can also be easily disseminated to a worldwide audience at virtually no marginal cost (Astorga, n.d.).

Statement of the Problem

The use of computer was introduced into Nigerian schools in the 1980's. However it has been observed that after about more than thirty (30) years, there are still teachers/lectures and students who neither own a laptop nor understand how to use it. This is not to talk about being aware of some of the packages in the computer/laptop (such as course contents, textbooks, and course materials) that could assist them in the teaching /learning process. Both lecturers and students should develop a personal and intellectual life that has the capability to function not only in familiar situations but also in novel situations. However, instead of the students who have laptops to use theirs to enrich the level of their knowledge and understanding through the use of open education resources they use it as a social network just for chatting with friends,

downloading music and posting pictures. Teachers/lecturers and students will lack the ability and confidence to face the outside world if they are lagging behind in the awareness, and use of internet facilities to enhance teaching and learning.

Purpose of the Study

The purpose of this study was to find out.

1. If lecturers and students in the department of Educational Foundations, Faculty of Education, Niger Delta University understand the meaning of Open Education Resources.
2. If the lecturers and students have been making use of Open Education Resources

Research Questions

The research questions formulated to guide the study are:

1. Do Lecturers and students understand the meaning of Open Education Resources?
2. Has lecturers and students been making use of Open Education Resources?

Methodology

The study adopted a descriptive survey method. The population for the study consisted of 40 lecturers, 128 undergraduates who are in 400 Level and 62 postgraduate Diploma in Education students in 2014/2015 contact who are all of the Department of Educational Foundations, Faculty of Education, Niger Delta University, Bayelsa State, Nigeria(Source- Departmental Records). A sample of Fifty Two (52) respondents comprising of fourteen (14) lecturers, seventeen (17) postgraduate diploma students and twenty one (21) undergraduate students, taken through simple random sampling technique participated in the study. A questionnaire titled Open Education Resources Questionnaire (OPEREQ) was used to elicit information from the respondents. The face and content validity of the questionnaire was certified by some measurement and evaluation experts in the Faculty of Education, Niger Delta University. The reliability was also ascertained by using test- retest reliability method. This was done by administering the questionnaire to twenty respondents (comprising lecturers and students) who are not of the Department of Educational Foundations. The questionnaire was readministered after two weeks to the same respondents. The results of the two administrations were correlated using Pearson- Product Moment Correlation. A correlation coefficient of 0.72 obtained showed that the questionnaire is reliable. The section A of the questionnaire elicited responses on the students' personal data while section B contained statements on the respondents understanding and use of open education resources. The response pattern in the questionnaire is the four likert type scale, Strongly Agreed- SA, Agreed- A, Disagreed- D and Strongly Disagreed-SD.

While SA is scored 4, A is 3, D is 2 while SD is 1. The data collected from the respondents were analyzed using percentage.

Result

Research Question I- **Do Lecturers and Students understand the Meaning of Open Education Resources.**

The data collected on this was analysed and shown in table I.

Table I: Respondents understanding of the meaning of Open Education resources.

Item	Respondents	SA		A		D		SD		Total	
		N	%	N	%	N	%	N	%	N	%
I Understand the meaning of Open Education Resources											
	Lecturers	7	50.00	5	35.71	0	0.00	2	14.29	14	100.00
	Postgraduate students	5	29.41	5	29.41	4	23.53	3	17.65	17	100.00
	Undergraduate students	4	19.05	6	28.57	7	33.33	4	19.05	21	100.00

Result in table I shows that out of 14 lecturers who participated in this study 12 (85.71%) understand what Open Education Resources meant (SA = 50.00%, A = 35.7%) while 2 (14.29%) have no idea of what Open Education Resources meant.

Ten (10) representing 58.82% (SA=29.41%, A=29.41%) of the postgraduate diploma students also understand the meaning of Open Education Resources while 7 of them representing 41.18% (D=23.53%, SD=17.65%) are ignorant of the meaning of Open Education Resources.

Similarly while ten (10) representing 47.62% (SA=19.05%, A=28.57%) understands the meaning of Open Education Resources, eleven (11) representing 52.38% (D=33.33%, SD=19.05%) are ignorant of it.

Research Question 2: Has Lecturers and Students been making use of Open Educational Resources?

The items used as variables of Open Education Resources are Course Contents, Textbooks, Lecture Notes, Projects, Journals, and Newspapers. The result obtained from the analysis of data is presented in table 2.

Lecturers(14)				PGD Students(17)								Undergraduates (21)												
Open Education Resources Items	SA		A		D		SD		SA		A		D		SD		SA		A		D		SD	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
I make use of Course contents on line.	2	14.29	7	50.00	4	28.57	1	7.14	3	17.65	5	29.41	7	41.18	2	11.77	1	4.76	8	38.10	8	38.10	4	19.05
I make use of Textbooks on line.	2	14.29	8	57.14	3	21.43	1	7.14	3	17.65	5	29.41	7	41.18	2	11.77	4	19.05	6	28.57	5	23.81	6	28.57
I make use of Lecture notes on line.	2	14.29	7	50.00	3	21.43	2	14.29	3	17.65	5	29.41	5	29.41	4	23.33	3	14.29	5	23.81	7	33.33	6	28.57
I make use of Projects on line.	2	14.29	8	57.14	2	14.29	2	14.29	1	5.88	7	41.18	7	41.18	2	11.77	5	23.81	6	28.57	4	19.05	6	28.57
I make use of Journals on line.	5	35.71	6	42.86	1	7.14	2	14.29	3	17.65	6	42.86	6	42.86	2	11.77	4	19.05	5	23.81	6	28.57	6	28.57
I make use of Newspapers on line.	2	14.29	3	21.43	6	42.86	3	21.43	3	17.65	6	42.86	6	42.86	2	11.77	6	28.57	4	19.05	4	19.05	7	33.33

Table 2: Respondents use of Open Education Resources

The research question 2 which was on respondents' use of Open Education Resources was analyzed and the result presented as shown in table 2.

The result shows that while only 64.29% of the lecturers make use of course contents on line, 71.43% make use of textbooks, 64.29% also make use of lecture

notes, 71.43% make use of projects, 78.57% make use of journals, and only 35.72% make use of Newspapers.

The result also shows that 47.06% of the Postgraduate Diploma Students make use of course contents, textbooks and lecture notes and projects respectively, while 60.51% make use of journals and Newspapers respectively.

The data collected from the Undergraduates also show that 42.86%, 47.62% 38.10%, 52.38%, 22.86% and 47.62% of the students make use of course contents, textbooks, lecture notes, projects, journals, and Newspapers respectively.

Discussion

The results of this study have shown that lectures are more aware of the meaning of Open Education Resources (85.71%), followed by Postgraduate Diploma Students (58.82%) and then undergraduate Students (47.62%). This difference could be attributed to many factors such as difference in the level of education, maturity, experience and exposure of the respondents. Lecturers and postgraduate diploma students have become more aware of the importance of Information and Communication Technologies and the benefits attached to the use of the facilities and software provided by ICT.

A more fascinating outcome of this result is that though 41.18% of the Postgraduate Diploma students and 52.38% of the undergraduate students claimed not to understand what Open Education Resources mean, majority of them have been making use of these resources without understanding their technical name.

It is also observed that lectures make more use of Journals (78.57%) and textbooks (71.43%) and least use of newspapers (35.72%). Also the postgraduate students' attention is more on journals and newspapers, while the undergraduate students pay more attention to projects (52.38), followed by textbooks and newspapers (47.62%). They however pay the least attention to journals.

The fourth item on the objective of teacher education as stated in the National Policy on Education is "to provide teachers with intellectual and professional backgrounds adequate for their assignment and to make them adaptable to any changing situation not only in the life of their country but in the wider world" (F.R.N, 2013). However, the findings of the study have proved the view of Utulu (2014) who noted that this objective is yet to be achieved since not up to ten percent (10%) of 21st century Nigeria Teachers are ICT compliant to be true. Their inability to both understand and make use of Open Education Resources indicates their lack of current professional background to impart knowledge to students using ICT devices. It also shows that they cannot adapt to changing situations both within the century and outside. Student teachers both at the undergraduate and postgraduate levels are also less

equipped to face the challenges of using ICT in the impartation of knowledge as well as in assisting their students to learn after graduation.

Conclusions

Through computer education, lecturers/teachers and teachers on training can improve on their professional training by constantly updating their knowledge on the list of available technologies and their contents of which Open Education Resources is one.

Education Students (both at the undergraduate and postgraduate levels) should be provided with training that will make them fit for the 21st century technological advancement. This will not however be achieved if their lecturers themselves do not make use of available materials in the net (OER's) that would help them to enrich and update their course contents and lecture notes. Both the teacher and the students are therefore expected to keep themselves abreast of the entire new trend in Information and Communication Technology. This will improve the professional competence of both the teacher and the learner.

Recommendations

In view of the findings in this study the following recommendations are made:

1. A seminar or workshop should always be organized for both staff and students in tertiary institutions to update their knowledge of new innovations in Information and Communication Technology.
2. Tertiary institutions and the government may have to collaborate in assisting students to get laptops at subsidized rates. This will help to improve students' level of utilization of ICT facilities especially for teaching and learning purposes.
3. Lecturers could also be assisted by the school authority to acquire laptops and other teaching and learning software at subsidized rates
4. There should be improvement in the availability of network in various parts of the campuses of tertiary institutions. Both students and lecturers should be able to use their laptops anywhere they are on campus.
5. Online teaching should be incorporated in the face-face interaction with students. Beginners may start with Continuous Assignments and short class tests. This will encourage students to get their laptops and to also get more interested in the use of ICT facilities.

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