
STUDENTS' AWARENESS AND USAGE OF OPEN EDUCATIONAL RESOURCES (OER) AS LEARNING TOOL IN THEIR COURSE STUDIES AT THE UNIVERSITY OF THE PHILIPPINES OPEN UNIVERSITY (UPOU)

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ABSTRACT

The abundance of technology nowadays is contributing to the development of learning practices. This gives learners greater opportunity to find, access, and use resources to benefit learning. Open educational resources (OER) are one of the few educational developments that emerged with technology. While it is true that there are a lot of OERs available on the internet, it is unsure how many learners are aware of their existence. This research aimed to identify how many students are aware of OERs, where they use OERs, and whether the educational institution encourages OERs. The researchers surveyed several students within the University of the Philippines Open University. The survey included learner demographics, statistics on learners' awareness and usage of OERs, learners' OER access locations, and the challenges they encounter when using OERs. The survey showed that the learners, regardless of age, are aware of OERs. They mostly access videos, research, and journals on web pages and Wikis. They find the OERs accessible and relevant, but reliability and visibility are challenging.

Keywords: OER, distance learning, open university, wikis, accessibility

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INTRODUCTION

The present education institutions are now slowly opening their services to bigger populations. In the age of information and communication, there is an abundance of technologies that gives opportunities for students to learn; even beyond the four walls of the classroom (Nyamwembe, et al., 2018). These technologies helped institutions to further their accessibility and reach to a greater number of learners who can study even beyond the four walls of the classroom. Hence, distance learning. The concept of distance learning has been and should always go together with open learning (Alfonso, 2014b). This means that there should be an accessible education to everyone with minimal restrictions.

Concerning the open philosophies of learning, United Nations Educational, Scientific and Cultural Organization (UNESCO) has coined '*open educational resources (OER)*.' OER is an educational resource that is offered to anyone (mostly for teachers, students, and self-learners) freely under some considerations. The certain openness of the materials makes it an effective tool as it is made by a recognized individual or institution, it is accessible, the content is commonly valid as it is licensed, it can be modified and improved (The Open University, 2016).

Open Educational Resources (OER) is any material that is available for use under an open copyright license. These materials vary from images, books, research publications, audio, multimedia, videos, etc (UNESCO & Commonwealth of Learning, 2011 as cited by Mc Kerlich, Ives and McGreal, 2013). It is commonly accessible to an individual but not necessarily free for use (Open Washington, 2017). To further the specification of OERs, OpenLearn defined the characteristics of OERs as findable, clearly described, licensed, reliable, modifiable, and usable (The Open University, 2016).

With the abundance of OERs, it is expected that the faculty and students are aware of the existence of such resources, how they can use it and how they can develop OERs that can help their fellow teacher or students be consumer and generator of knowledge that is suitable to the current needs of the community.

Use and Awareness of Open Educational Resources

A lot of Open and Distance Learning (ODL) institutions like the University of the Philippines Open University, has been using open educational resources as learning materials on some of its program's courses. It is common for ODL institution to create, develops, use, or improve OERs as it is one of its functions given that it follows an 'open' philosophy to teaching and learning. The production of accessible and free learning resources is one of the institution's goals that will lead to the betterment of its stakeholders. Developing within them the value of freedom, inclusivity, access, resource sharing, learner-centeredness, flexibility, and reflection (Alfonso, 2014a).

The eOntario Campus conducted a study that presented the current awareness of college and university instructors. The data shown that these teachers are familiar with the existence and usage of OERs but exhibited a greater reliance on the learner-purchased textbooks as 70% of them answered that they prefer such resources. Though the usage of the purchased resources is dominant, there is a strong drive of possibly shifting into the use of OERs and increase their funding on the creation of such (Hayman, 2018). A study made in Indira Gandhi International Open University's study also shown great awareness and utilization of OERs in their open and distance education as 94% of the respondents know what OERs are and 79.7% are using them as resources in their classes. The main hindrance over the use of OERs is the huge amount of time that they are allotting in finding reliable and appropriate OERs that are fit for their field of specialization (Urbano, 2022).

Another study made in the UK showed that students from traditional and non-traditional education setup are aware of OERs. 65% of the traditional and 66% of the non-traditional said that they are aware of OERs while 21% of the traditional and 25% of the non-traditional students are strongly aware of the usage and existence of OERs (NUS, 2014 as cited by Nyamwembe, et al., 2018).

Research Questions

This research seeks to measure the awareness and rate of utilization of open educational resources in their studies at the University of the Philippines Open University. Specifically, it seeks to answer the following questions:

1. How aware are the students regarding Open Educational Resources?
2. How do the students utilize Open Educational Resources?
3. Do the activities of the University of the Philippines Open University encourage the use of Open Educational Resources?

Theoretical Framework

The study is based on the assumptions of the connectivism theory of learning wherein individuals learn through the giving and taking of knowledge from the connections it makes with the learning community. (Kop & Hill, 2008). OERs, being accessible to anyone, encourages the giving and taking of knowledge and gives the students opportunities to look in advance or revisit the course materials. Moreover, the importance of the awareness and utilization of educational resources (the utilization and generation) can connect learners to each one and to the knowledge network they choose (Siemens, 2008b as cited by Kop & Hill, 2008). This concept is also in line with the distributed cognition developed by Hutchins in the mid-1980s which stipulates that thinking, learning, and decision making are not personal but a shared process (Panke & Seufert, 2012). Thus, the awareness and use of open educational resources can be associated with better learning and understanding of the concepts that need to be learned.

Conceptual Framework

The conceptual framework of the study is derived from Panda's OER research. The mentioned framework aims to measure three critical criteria for the awareness and the usage of OERs. The research made by Panda seeks to identify the awareness, utilization, and usage needs of the respondents. This is true because of the diversity of the programs wherein the respondents are enrolled (Panda, 2013). However, in this study, two-part research is used to identify the rate of awareness and utilization of OER among the students of the University of the Philippines Open University. As shown in Figure 1, the first part of the research will identify the awareness of students in the use and role of OER in the learning process. The first part identifies the different OERs the students were able to use, the licenses and copyright of the educational resource, and where they have initially encountered OERs. The second part of the research seeks to identify how frequently do the students use open educational resources, what specific activities were they employing OERs, and the problems they encounter that hinder them from using OERs.

All the studies presented above that came from three different countries shown that both students and teachers, whether from traditional and non-traditional learning setup, is aware of the existence of OERs. Moreover, they are currently using or are willing to try using OERs as tools for learning.

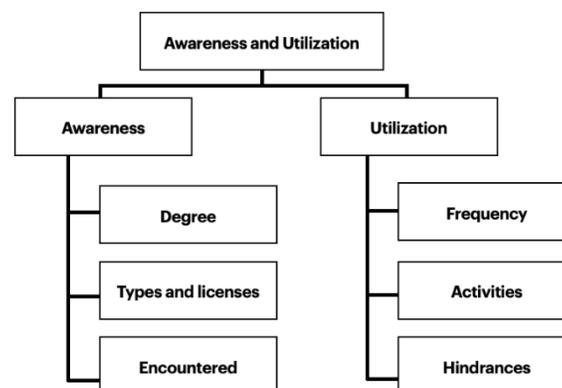


Figure 1. Conceptual Framework

METHODOLOGY

Research Design

The quantitative study follows a descriptive design with an ontological assumption that the reality of a certain object or phenomenon is measurable and that its reality is independent of human perception. Moreover, it is also assumed that there is only one truth in a certain reality (Slevitch, 2011). This opens an objective lens that describes the phenomenon as it is without subjectivity to the respondent's nor the researcher's bias. The study will focus on the measurement of how many students are aware of OERs and who among them use OERs in their course studies.

Research Methodology

The online survey is given to the EDDE 206 course students of the University of the Philippines Open University. To ensure the reliability of the research instrument, a Likert type survey was constructed. All the data gathered is interpreted to have an idea of the current level of awareness and utilization of OERs of the population.

Research Participants

The research participants are the graduate students of EDDE 206 – Research in Distance Education course of the third trimester in the University of the Philippines Open University in the academic year 2019-2020. There are 21 students currently enrolled in the course that comes from different cohorts. The respondents of the survey have ages that range from 25 to 45 years old and are currently studying at UPOU from 1- 6 years. Of the total number of participants, there are only 14 students who participated in the survey.

Data Analysis

The data is analyzed using a descriptive approach. It is done by looking over the frequencies, percentage mean, and ranking of the criteria. The interpretation of means was based on the following:

Table 1. Interpretation table

SCALE	Interpretation
1.00 – 1.50	Strongly Disagree
1.51 – 2.50	Disagree
2.51 – 3.50	Neutral
3.51 – 4.50	Agree
4.51 – 5.00	Strongly Agree

RESULTS AND DISCUSSION

Relationship between the students' awareness of the OERs and its utilization for their course activities

The study aimed to determine whether the students' awareness of OERs brings about the possibility of its utilization on the course activities throughout their years of study at UPOU. The researcher initially determined the students' awareness of the existence and nature of OERs. Six questions following a five-point Likert scale design that ranges from strongly agree, agree, neutral, disagree, and strongly disagree is made to measure the level of awareness.

Table 2. Descriptive Statistics on Students' Awareness of Open Educational Resources

Criteria	5	4	3	2	1	MEAN	SD
I am aware of the purposes and uses of OERs	9	4	0	0	1	4.43	1.09
I am aware that they can be accessed freely	8	5	0	0	1	4.36	1.08

I am aware that there are different creative commons licenses on OERs	6	6	1	0	1	4.14	1.10
I am aware that some OERs are not to be used commercially	6	4	3	0	1	4.00	1.18
I am aware that I can transform or build upon an existing OER	5	4	4	0	1	3.86	1.17
I am aware of websites where I can find OERs	3	6	4	0	1	3.71	1.07
	Average: 4.08						

The respondents of the study were asked about their awareness of nature, uses, and rules regarding the use, creation, and sharing of open educational resources. Based on the result of the survey, the respondents “Agreed” that they are aware of the existence, usage, and sharing of open educational resources. A total of 93% were positive about their awareness while a total of 7% disagreed with the awareness of open educational resources and know that it can be accessed freely. However, the respondents exhibited a slight dispersion regarding their awareness of the use, creation, development, and location of the different OERs when asked specifically. Table 2 shows that the respondents generally agreed that they are aware of the websites wherein they can obtain OERs but are not confident that they fully understand it. Only 64% of the respondents agreed with the statements while the other 36% were either neutral or in disagreement with it. The same follows with the awareness of their ability to develop or build upon an existing OER wherein 71% agree that they are aware of the non-commercial use of OER while 29% are not. The students understand the “Open Philosophies” to learning as it has been discussed during the orientation of UPOU though open educational resources are not greatly emphasized and discussed in detail to the students.

Usage of Open Educational Resources

Table 3. Types of Open Educational Resources used by the students

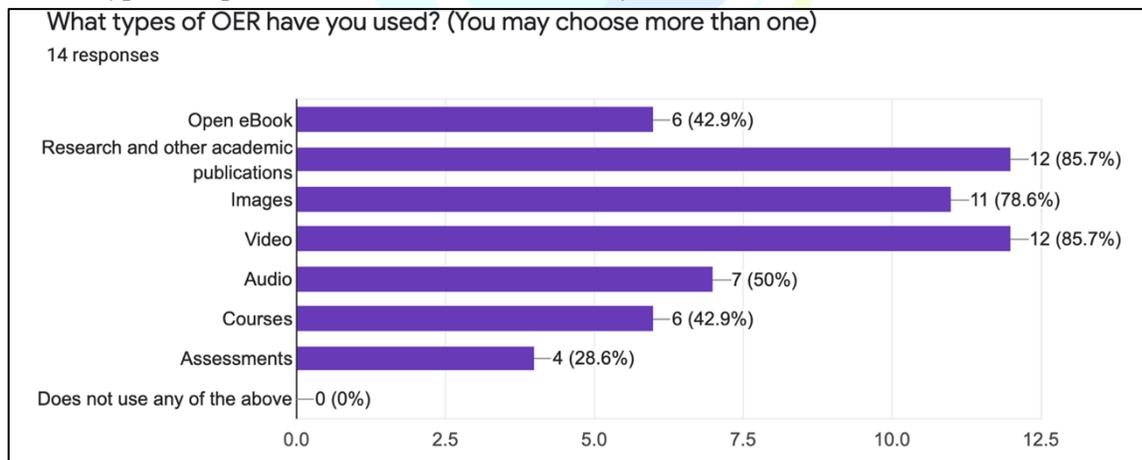


Table 4. OER Access location

Criteria	5	4	3	2	1	MEAN	SD
I access OERs through... [Instructional-based courseware/software]	2	7	3	1	1	3.57	1.09
I access OERs through... [Web pages]	6	8	0	0	0	4.43	0.51
I access OERs through... [Public domain courseware/software]	4	8	0	1	1	3.93	1.14
I access OERs through... [Wikis]	8	3	1	1	1	4.14	1.34
I access OERs through... [Learning object soft- ware]	4	4	2	3	1	3.50	1.34
I access OERs through... [Social networks (Face- book, Twitter, blogs, Cloudworks, etc.)]	4	5	3	0	2	3.64	1.34

Videos, images, and academic publications are the common types of open educational resources used by the students. This can be true considering that these open educational resources can be utilized to accomplish course-related activities. Most of the courses require text-based outputs or videos from the students. While Open eBook, Audio, Courses, and Assessments can be used as supplementary materials in the learning of the concepts of the courses. Table 4 supports the assumption of the abundance and accessibility of video, images, and academic publications. The survey has shown that the students commonly access open educational resources through Web pages and Wikis. The accessibility features of the different search engines like google and google scholar also help the students in easily locating images (through google images), videos (through YouTube), and academic publications (through google scholar). The proliferation of the creation, use, and sharing of OER images, publications, and videos support the assessment of Panda & Chen (2013). The study has shown that most of their respondent associate OERs to videos, books, and e-books.

Table 5. Motivators and Limiters on OER usage.

Criteria	5	4	3	2	1	Mean	SD
I use OERs because of its... [accessibility (can be accessed without restrictions)]	10	3	0	0	1	4.50	1.09
I use OERs because of its... [abundance (there are multiple OERs for different topics)]	3	11	0	0	0	4.21	0.43
I use OERs because of its... [reliability (the correctness of content)]	3	7	3	0	1	3.79	0.61
I use OERs because of its... [relevance (the contents of OERs are fit with the present context)]	5	8	1	0	0	4.29	0.61
I use OERs because of its... [academic requirement (it is a recommended activity in the course)]	3	6	1	2	2	3.43	1.40
I use OERs because of its... [multiplicity (different media other than what is recommended as course material)]	4	7	1	1	1	3.86	1.17

The main reason as to why the students use OER falls into its accessibility and relevance. Table 5 shows the response of the students regarding the different characteristics of OERs as presented by the Open University (2016). Since the University of the Philippines Open University is an Open and Distance eLearning institution, it is plausible that most of the students have a stable internet connection which allows them to go through the different collection of OER that could help them understand concepts and theories better.

The reliability and requirement fell at the bottom of the list. The students were more neutral regarding these two aspects. Since most open educational resources are free to access, develop and edit, there are presumptions regarding its reliability as a source of knowledge given that the country has not that open to the use of OERs (Garcia, Simonette, & Serrano, 2013).

Table 6. Limitations on the Use of OERs

Theme	Frequency
Location (websites) where there are Open Educational Resources	7
Reliability of resource content	3
Too many resources from different authors	1
No problems with OERs, other reasons	3

Though the students are aware of the open educational resources, they are having problems with the extensive use of such resources. Table 6 shows that the main reason as to why they refrain from using

OERs is that they are not that knowledgeable as to where they can access such resources or internet speed to sustain the use of OERs. The next problem is the reliability of the content. Results on both Table 5 and Table 6 show the hesitance of the students to use OERs because of the possible lapses on the quality of the content provided by Open Educational Resources. These two problems agree with what Garcia, Simonette & Serrano (2013) are discussing their paper regarding the initiatives of the Philippines towards Open Knowledge.

The effect of course activities in UPOU on the search and utilization of OERs.

Another objective of the study is to determine the influence of the course activities (discussion forum, creative projects, researches, etc.) on the search and utilization of OERs.

Table 7. Use of OERs on course-related activities.

Criteria	5	4	3	2	1	Mean	SD
I am using OERs for/as... [research]	8	6	0	0	0	4.57	0.51
I am using OERs for/as... [self-directed studies]	7	6	0	0	1	4.29	1.07
I am using OERs for/as... [additional course reference]	8	6	0	0	0	4.57	0.51
I am using OERs for/as... [reference for my Discussion Forum Post]	8	5	0	0	1	4.36	1.08
I am using OERs for/as... [faculty marked assignments]	3	8	1	0	2	3.71	1.27

Table 7 shows that the students are in agreement that they are using OERs in the learning process of their courses. The most typical function of OERs in their study is to provide additional knowledge on the course as well as provide further research on the concepts related to the course. Though the activities do not necessarily imply the use of OERs, this encourages students to go beyond the resources that are handed out by the faculty-in-charge. As many of the academic publications have closed access to their resources, this leaves most of the students with no choice but to go to resources that are open and easily accessible to improve the quality of their learning.

CONCLUSION

The study has clearly shown that the students are aware of the existence of open educational resources and considers it a useful tool for the learning process on their course of study at the University of the Philippines Open University. Though this is true, the students are not fully confident in their knowledge regarding the different OER licenses, the process on how each OER are produced and developed, and the location as to where OERs can be found. The lack of this knowledge hinders them to maximize the use and creation of open educational resources that they can use as materials in the study of the concepts within the course.

Despite the hindrance, the students have been able to use OERs on most of their course-related activities and self-directed studies. This proves that the activities at the University of the Philippines Open University encourage students to access such resources and open themselves to a wider network of knowledge that is free to access.

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