EXPLORING THE VIEWS OF UNIVERSITY STUDENTS ABOUT THE USE OF OPEN ONLINE EDUCATIONAL RESOURCES

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ABSTRACT

Online educational resources are generally accessed as digitized materials that are offered freely and openly for educators, students and self- learners to use and reuse for teaching learning, and research purpose (Lakshmana, 2011). This paper presents a qualitative study about the use of open online educational resources (OOER) at university level. Our aim was to exploring explore the university students' views about the effective use of OOER. By conducting focus group interview, we developed an understanding about university students' views about OOER and how they contribute to their learning, to what extent university students they use OOER, how they think that OOER contribute in enhancing their academic knowledge, and which the problems that they face in accessing and using OOER.

We analyzed data by making transcripts, generating themes from data, and make findings based on themes. Data revealed that university student use different types of online resources among in which Google, Science direct, Wikipedia, and Digital library are were frequently reported included. Students use OOER for different reasons such as getting up-to-date knowledge, searching relevant literature, and finding a diverse variety of material in a short period of time. However, they face several difficulties in using and accessing OOER some of which include like technological issues, access of data etc. We concluded that the effective use of OOER may help the students in enhancing their academic knowledge.

Keywords: OOER, Collectivism, interview, self- learners.

1. Introduction

Online educational resources are usually accessed as digitized materials that are offered freely and openly for educators, students and self- learners to use and reuse for teaching learning, and research purposes (Lakshmana, 2011). OOER includes learning content open textbooks, software tools to develop, use and distribute content, and implementation resources such as open license. But people in developing world have limited access to technology. Although there is a huge increase in the use of mobile phone and internet technology across the world, but still a large portion of the developing world remains untouched by ICT developments (Atikns, Brown, & Hammond, 2007).

Educational technologies have changed the learning styles of students including online educational resources such as Google scholar, E book library, and Wikipedia. These resources help to save the time of students and further enhance their knowledge. This advanced technology has greatly influenced the significant growth of higher education over the few past decades and this is expected to continue (Pea, 2002). Through the sources of this technology, by using open online educational resources (OOER), students get updated knowledge and information and explore their interest to enrich their academic knowledge.

This qualitative study is undertaken to explore university students' views about the use of OOER. As we examined their views about the use of open online educational resources, we also developed an understanding about how do they think OOER contribute to enhance their

academic knowledge, to what extent they use OOER in their learning process. The main focus of this study is to know and understand the views of university students' about the use of OOER, in order to enhance their knowledge.

1.1. OOER- A conceptual framework

This study explored the university students' views about the use of open online educational resources. It developed perceptions of university students' about OOER, how they use online educational resources in their learning process and how they get benefits from these resources.

The meaning of "open educational resources" originates from the forum that is on the Impact of Open Courseware for Higher Education in Developing Countries (UNESCO, 2002). It was in this forum where Saul Fisher from the Andrew W. Mellon Foundation used the expression "open educational resources" to explain the new model of sharing educational materials.

A growing body of literature survives on the question of openness and defining OER. One popular attempt to define openness from David Wiley sets out four requirements, the '4R Framework' of reuse, revise, remix and redistribute (Wiley, 2006). The forum concurred and offered the accompanying definition of open educational resources and open online educational resources. Open Educational Resources (OER) are instructing and learning materials that are freely accessible online for anybody to utilize, regardless of whether someone is a teacher, a student, or a researcher. OER can exist as littler, isolation resources that can be blended and consolidated to shape bigger bits of information or as bigger course modules or full courses (Mossley, 2013).

The term "open online educational resources'' (OOER) focus on the copyright permission data which can be shared for educational purpose. The main idea of open educational resources movement is that technology provides extraordinary opportunity to every leaner to share, use and reuse the material on particular World Wide Web (Smith & Casserly, 2006).

Some researchers prefer to define each component of the term OOER rather than defining the entire term.   The researcher define each of the four concepts in the term OOER, questioning what is meant by "open," "online" "educational," and "resources" (Mulder, 2007). Open means those resources which are easily accessible at any time. There is no cost involved to use the contents of these resources and also there is no issue regarding the copyright and licensing permission (Wiley, 2010).

Later, openness has been described as (Wenk, 2010).

i.   The right to utilize the work and get the benefits from these resources.

ii.   The opportunity to test the work and to apply information obtained from it.

iii.   The freedom to make modifications, and to distribute revised material.

In the modern world, individuals are depending more on technology for valuable data sources than on conventional sources. Advancement in the field of Information Communication Technology (ICT) allowed the utilization of Internet and other online sources for organizing, accumulation, association, and accessible the data on a vast scale (Smith, 2009). This is because of there is no control on a specific bit of data and there is no copyright issue for using these online resources; these resources are easily available for every person who want to gain knowledge and benefits by using these sources. Also, different diaries and books issued by business associations don't have a control unit including editors. Large portions of the sites on

the internet empower anyone to present any sort of data without being controlled (Brown & Adler, 2008).

Different online resources are available in universities to provide a variety of useful information from different sources such as academic journal database, Search engines; Electronic libraries.

The term "educational" in the context of this study needs to be clarified as well. Does the online material that is available on different websites only for formal education or for non-formal education (outside the school)? Literature revealed that learning is not limited to only formal settings, it also occurs in non-formal setting that may require OER. The reason for utilizing OOER in education is to encourage behaviors that empower the advancement of both individual and social abilities for understanding and acting. The meaning of advanced resources is those that can be duplicated and utilized without ruining the stock, are non-match or sustainable assets. Thus, OOER are those materials or resources that can be attracted on request to work successfully.

There are multiple benefits of using OOER such as these resources are freely available for every individual; there are no copyright or cost issues for gaining knowledge from these sources. These resources give benefits to institution, teachers, and students. OOER enhance proficiency, cost and quality of educational resources by sharing and reusing online materials. Teachers can use different teaching methods and adopt different teaching styles according to the situation and learner needs by using online resources.

Students get advantages from these resources by searching relevant and accurate material in short period of time without cost rather than using traditional material like searching books which is more time consuming as compare to using online resources. Web-based education tools increase the ways of communication between class members, student and teacher by using discussion board, chats, and e-mails etc. (Kubala, 1998).

1.2. Research questions of the study

The main focus of our study is to know about the university students' views about the use of open online educational resources in order to enhance their learning. Through this study, we also know that to what extent university students' use OOER and which problems they face in using or accessing OOER. We frame our study within the following research questions:
1.   What are university student's views about open online educational resources OOER?
2.   Why university students' use OOER?
3.   What are the problems faced by university students in accessing and using OOER?

1.3. Theoretical background

According to our study, two theories have informed this study for develop a deep understanding of the process. One is Distributed cognition theory (Hutchins, 1995) and the other is Connectivism learning theory (Siemen, 2005). Edwin Hutchins developed the theory of Distributed cognition in the mid-1980, based on his ethnographic research about team decision making process, activities and instruments involved in navigating navy ship. Hutchins influential work: "cognition in the wild" was soon adapted to the context of human computer interaction (HCI) and computer supported collaborative work (CSCW).

 Distributed cognition allows us to make sense of learning networks and emergent process in web based writing or collaborative knowledge management through social tagging. According to this view, information and communication technology (ICT) are not just resources for learning,

rather they are part of cognitive infrastructure because they also develop the mental ability of the students.

This idea is also prominent in the learning theory of collectivism which is developed by George Siemen and other educational researchers in 2005. Collectivism conceptualizes knowledge as distributed across information network and stored in a variety of digital format. This perspective views learning as recognizing patterns in technology, and enhanced personal networks. The concept of massive open online course (MOOC) is particularly tailored towards distributed cognition and connectivism (Boitshwarelo, 2009).

These theories have three main components; information communication technology (ICT), computer supported collaborative work (CSCW) and human computer interaction (HCI), and massive open online course (MOOC). These components are different type of online resources and we employed the distributed cognition and collectivism theories because both these theories focus on students learning through the use of online educational resources and how these resources develop the mental ability of the students and how students get benefits from these resources.

2. Methodology

2.1. Background of the study

The main purpose of this study is to know and understand the views of students' about the use of open online educational resources at university level. Through this study, we explored that how do university students use online educational resources and to what extent these resources are helpful for them in their studies, and which challenges do they face in using OOER. Different researchers used different methods for exploring the views of students' about the use of online educational resources at university level such as quantitative and qualitative method (Geser, 2007).

In this study, we employed a qualitative research approach because we wanted to explore the university students' views about the use of online educational resources (Pickard, 2007). Consequently, we used focus group interviews to explore students' views about the use of online educational resources.

2.2. Research design

This study employed a qualitative research approach and used phenomenological design through which university students' share their experience about using OOER in their learning process. We used focus group interviews as means to gather university students' detailed views about the use of OOER.

Participants:

The students were enrolled in different study programs including Masters, MPhil and PhD in a well-reputed public-sector university of Pakistan. Focus group interviews allowed the participants to express their own point of views in a relaxed environment without any hesitation. These interviews further allowed us to generate multiple views regarding the use of OOER in a short period of time.

2.3. Sources of data

We used multiple focus group interviews as a source to collect data regarding the university students' views about the use of online educational resources. In a focus group interview, multiple participants are interviewed together. The focus group interview is useful in generating large amount of information in a short time. As we conducted focus group interviews, we kept

the discussion under control and focused on the area of interest by preparing a list of questions. We facilitated and encouraged the respondents to share their experiences. However, the findings generated through these focus group interviews are not meant to make generalization due to small number of students who participated in this study (Krueger, 2000).

We developed a list of questions to ask from our respondents during the focus group interviews. These questions were guided by the Distributed cognition and collectivism theory. We developed a total of 8 open-ended questions to explore the university students' views about the use of OOER.

As we conducted the focus group interviews with our participants, we played the role of moderator and facilitator. We, as researchers, allowed the respondents to share their experiences as much as possible on the entire phenomenon.

We conducted three focus group interviews from Masters, MPhil and PhD students from enrolled in a public university. Each group has five participants. We began the interviews by introducing ourselves to the participants. . We explained to them the purpose of our study and informed them of the procedures involved. We further provided them with the consent letter to seek their written approval. As we started asking them questions, we further probed their ideas by using probing questions. We tried to maintain a comfortable environment for our participants and facilitated respondents to participate in the conversation. We recorded the focus group conversations in an audio recorder. Audio recorder provides the accuracy of the conversation. Besides, we made important hand notes during these conversations.

The ethics in qualitative research ensure that the rights and interest of participants who take part in a research study are well-protected (Hesse-Biber & Leavy, 2011). Consistently, we obtained formal permissions from the participants before the study. We provided them with all the necessary information about the topic to make sure that every participant understands the topic.

Consent letters were signed from every participant. All the participants were ensured that their identity will remains confidential in the thesis report. We further reminded them on multiple occasions that their participation is voluntary and they can refuse to participate in our study at any time during the focus group interviews without any obligation.

2.4. Data analysis

While we have documented some essential steps employed for data analysis in this section, it is important to understand that qualitative analysis does not proceed in a systemic fashion. We began by transcribing our data, preparing memos, establishing codes and then interpreting the findings (Hesse-Biber & Leavy, 2011). As soon as we conducted the focus group interviews, we transcribed the audio recording and prepared transcripts. We stored the data generated through focus group interviews at different locations like laptop, mobile and USB. The data analysis process began with reviewing the transcripts and notes made during the focus group interviews. Then, we make themes from these notes and make findings based on themes.

3. Presenting the results

This study examined the university students' views about the use of open online educational resources (OOER) from Distributed cognition and Collectivism theory perspective (Hutchins, 1995). Based on data we generate main themes of our study for presenting the results of study. There are three main themes of our study.

1. University students views about OOER

2. Reason for using OOER
3. Problems faced by the university students while using OOER.

3.1. University students views about OOER

The students who participated in our study revealed that they consider the online learning content and tools as open online educational resources. These resources include: online thesis, articles, journals, Google, Wikipedia, Science Direct, search engines, digital library and You tube. However, the participants of our study have no knowledge about the implementation of educational resources as online educational resources such as intellectual property licenses to promote open publishing material.

Themes	Evidence
Defining the OOER	"The online educational resources are different like Search engine, Google, you tube and like Eric. So, These search engines are very useful for researching articles, and anything which is regarding the research e.g. books, thesis, journals" (Fareeha, P1).
	"Open online educational resources are those resources Which are easily available and are easily accessible Which don't have copyright issue and not pay any cost. This can include journals, articles, e-book and different sites material" (Iqra, MP3).
Types of OOER	"At university level, I mostly use Google scholar, Digital library and Wikipedia for the searching of Verified material" (Bilqees, p3).
	"I use different articles, pdf files, Google, Wikipedia, Eric, search engine as well for the purpose of my Study" (Khalida, p4).
	"I use many online resources at university level in Which Google and sometime some videos are present on you tube. I also use that and sometime Wikipedia is also helpful in making assignment" (Shazra, M2).

3.2. Reason for using the OOER

The data from our study suggest that university students use OOER for different purposes such as searching for relevant material, getting related information in a short time, collecting up to date information, getting innovative ideas and saving time.

Themes	Evidences

Searching relevant literature	"OER are very helpful in our study. You search material according to your topic at home and make your assignment. Now-a-days OER are very helpful for our study" (Niba, M5).
Ease of access	"Actually the first is most important thing is accessibility. So, it is very convenient for us that we can assess any kind of you know journal, articles, pdf which is more relevant for our study. From net rather than to go specify market to buy books, to consult with any experts Ah…………….. So, that's why we using internet rather then we purchase anything" (Sidra, p2).
Time saving	"OER are very time saving and through online resources, we get recent studies which are not available in hard form easily" (Asifa, MP1).
Up-to-date information	"According to asifa, zunaira and iqra OER are time saving and updating knowledge are found. Through online resources variety of information are collected through using these resources rather than using books" (Zeenat, MP4).
Variance of material	"According to my point of view, we get innovative ideas from online educational resources. We know about the creative thinking of different people by using online educational resources" (Iqra, MP4).

3.3. Problems faced by university students in using OOER

The data from our study suggest that the participants find it difficult to choose relevant information according to their topic from a pool of material available on the internet. They further reported that they only select material which is authentic, relevant to their topic and most importantly that have reliable references. Another problem faced by the participants was losing focus which leads to attention diversion. As the internet gives access to educational resources as well as to other apps such as Facebook, you tube etc.; this also leads to attention diversion while studying.

Themes	Evidences
How to manage material	" Being a researcher I think you are confused because variety of material is available on internet and a lot of confusion when we search material for our study" (Iqra, MP3).
Diversification of material	"I will precede iqra point of view the diversification of material and confusion are present when we search relevant material for our study. If you study a specific topic and you have a lot of material then your concentration is divert" (Zeenat, MP4).
Accuracy of material	"Sometime, internet does not provide the correct data, we should use appropriate websites and link for the searching of correct data. Sometime, fake material are present on internet and due to this reason we cannot

	find appropriate and correct data according to our topic or subject. So, we should use only those resources which are familiar which are correct and which are not fake. So, by this we collect data in good manner" (Shazra, M2).
Non-availability or Non- accessibility	"Due to non-availability and non-access of internet sometime. So, it become difficult to have these resources and it is not in favor of the students" (Bilqees, P3).
Sometimes, expensive	" Sometimes, most relevant books and articles we cannot open because we have to pay. Sometime, it is very expensive for me. So, this is limitation of online educational resources I think" (Fareeha, P1).

4. Discussion of results

This study examined the university students' views about open online educational resources (OOER) and the problems which they faced while accessing and using OOER. For this purpose, we collected data through focus group interviews. This allowed us to explore the views of university students about OOER, and the challenges that they face in doing so. The major interpretations drawn from this study are addressed in the answers of the following research questions of the study.

1. What are university student's views about open online educational resources OOER?
2. What are university students' views about using OOER?
3. What are the problems faced by university students in accessing and using OOER?

4.1. What are university student's views about open online educational resources OOER?

The findings generated through this study revealed that university student' have different views about OOER. Overall, they consider that open online educational resources are electronic resources which help them with their studies. Students also reported different types of online educational resources in which Google, Wikipedia, Google scholar, science direct, you tube, digital library and other official websites are included.

Overall, these findings are similar to the findings of the researchers who reported that the open online educational resources (OOER) are learning materials freely available in the public domain and include learning content such as journals, tools such as soft wares and various , apps, and other implementation resources, such as intellectual property licenses to promote open publishing material (Pegler, 2010). This shows that the university students who participated in our study have sufficient understanding about OOER. Moreover, they are able to identify and use a number of OOER for study purposes.

4.2. Why university students use OOER?

The findings of our study further demonstrate that university students use OOER for different reasons. These include: getting up-to-date knowledge and information, searching relevant literature, ease of accessibility, and for getting a variety of material and innovative ideas in short time. Most of the students reported that they use OOER because it saves them a lot of time. They reported using OOER while searching for relevant material instead of going to the library and searching relevant material from different books. Overall, these findings are similar to the

researchers who claim that the OOER enhance student-to-student and faculty-to-student communication through discussion boards, chats and e-mails because the students exchange different ideas through e-mails rather than face-to-face discussion which is sometime wastage of time. Online resources make enabling student- centered teaching approaches because online resources provide opportunities for exploration and encourage additional rehearsal time. They also remove reliance on physical attendance (Keats, 2009).

4.3. What are the problems faced by university students in accessing and using OOER?

The findings of our study revealed that university students faced many difficulties in accessing and using OOER. The basic problem that they face while using OOER is how to manage a lot of material that comes through. This is because a variety of material and information is present on the internet and students cannot decide which material to use or not to use. Other problems are non-availability of the internet, non-availability of electricity, and diversification of material. Another important problem that students face while using OOER is attention diversion which occurs due to presence of different unimportant apps such as you tube, Facebook which lead to attention diversion while studying, students finds difficult to only focus on their work. Our findings are consistent with the claims that students' face many problems while using OOER which include discovery problem, sustainability problem, quality problem and remix problem (Benkler, 2005).

5. Conclusion and future directions

This study has provided a detailed understanding about university students' views about the use of OOER and the problems that they face while accessing and using OOER. This knowledge may prove useful for the students' as well as teachers' because OOER are frequently employed these days and our study indicated that OOER could be useful as they allow students to get relevant material according to their topic in a short period of time. However, there is a need to train students about how to use these resources in positive and productive way and eliminate the challenges that they face in doing so. Furthermore, there is a need to improve ICT skills of the students since many of our participants expressed reluctance in accessing and using OOER because they lack relevant skills.

This study explored the university students' views about OOER and the problems that they face while accessing and using OOER. While our study revealed that university students are keen to use OOER for educational purposes, we suggest that future researchers should focus more on investigating classroom situations in which OOER are embedded in positive and productive ways to enhance students' learning and outcomes. Furthermore, there is a need to examine the use of different and novel technologies (e.g., hand phones, tablets) in helping students access and use OOER.

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