



Use of Open Educational Resources Amongst Students of Social Development Department in Kaduna State

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Abstract

The study explored the use of Open Educational Resources [OER] amongst students of social development in Kaduna state. Three research questions and objectives guided the study. A descriptive survey research method was adopted. The population of the study consists of all students in the department of social development at Shehu Idris College of Health Sciences and Technology, Makarfi (SICHST, Makarfi) and those at Kaduna State Polytechnic (KADPOLY) totalling one thousand and fifth-three (1053). A sample of four hundred students (400) was selected using simple and proportionate random sampling techniques. The questionnaire was used for data collection. The instrument was validated by one (1) statistician and two (2) language experts in the Faculty of Education, A.B.U., Zaria. Cronbach Alpha statistics was used to measure the internal consistency of the instrument. Reliability indexes of 0.81 to 0.87 were obtained respectively. Mean scores and standard deviation were used to answer the research questions. The study revealed that the level of availability of OER in the two institutions was 57.2%, accessibility 53.5%, while, utilization was 49.1%. Furthermore, OER such as open Audio-podcasts, books or book chapters and classroom activities are not much available, but, the ones available are well accessed and utilized by the students, with exception of, open classroom activities which recorded a high level of accessibility but low level of utilization. Based on the findings, it was recommended among others that lecturers and scholars in the field of social work and development studies should as a matter of urgency engage in the development of open Audio- podcasts, books or book chapters and classroom activities. This will make the materials available for students' use and knowledge development in the state.

Keywords: Availability, Accessibility, Utilization, OER, Social Development, Students

Introduction

Education is a key issue of the 2030 Agenda for Sustainable Development, being both directly connected to the 17 goals of the agenda and at the core of Sustainable Development Goal 4 (SDG4), which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (United Nations, 2015; Zhang et al. 2020). One target of SDG4 is equity, which is defined by its goal to, ‘by 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including indigenous peoples and children in vulnerable situations’ (United Nations, 2015:7). This goal can be achieved through the effective production of Open Educational Resources [OER] by scholars and academicians at various levels of the educational system.

Open Educational Resources (OER), defined as ‘teaching, learning and research materials in any medium that may be composed of copyrightable materials released under an open license, materials not protected by copyright, materials for which copyright protection has expired, or a combination of the foregoing’ (UNESCO, forthcoming), have the potential to contribute to reaching this objective by increasing access to learning as well as improving the quality of the learning experience (Ehlers, 2011). Hence, OERs are highly beneficial to students in higher institutions of learning.

Added to this, Atkins, Bennett, Brown, Chopra, Dede, Fishman, and Williams (2010); Rowell (2015) argued that institutions of higher education are collectively an integral and essential element of modern society, building on this, it becomes vital that lecturers and scholars provide the highest quality teaching and learning environment possible for the students they serve. Efforts to prevent a decline in the quality of instruction students receive is an obligation that scholars in Social Work and Development Studies must not neglect (Hoosen, 2012). Open Education (OE) and Open Educational Resource (OER) have their origins in the open-source, open knowledge and free sharing movements in the latter part of the twentieth century, although the relationship of those movements to education has been a symbiotic one (Butcher, 2011; Coughlan, & Perryman, 2011; Mishra, 2015).

Nigeria possesses the largest higher education system in Sub-Saharan Africa with a total of 45 federal universities, 54 in states and 99 private, a total of 198. Similarly, there were 38 Federal Polytechnics, 48 State Polytechnics, 61 Private Polytechnics, which made the total number of Polytechnics in Nigeria to 147, also there were 28 Federal Colleges of Education, 51 State Colleges of Education, 84 Private Colleges of Education, 10 Polytechnics offering NCE, and 1 other institution, which made the total number of NCE-Awarding Institutions in Nigeria to 174 (Odunsi, 2021). Thus, the country has more universities and higher education institutions when compared with other countries in the West African Sub-region (Adewole, 2014). As such educators must provide the highest

quality teaching and learning environment possible for the students they serve (Crawford-Ferre & Weist, 2012).

The term Open Educational Resources (OER) was first introduced in 2002 at the Forum on the Impact of Open Courseware for Higher Education in Developing Countries held by the United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2011). Within this innovative, global educational atmosphere educators share the course materials they create as OER thereby removing barriers to education that many states and nations have previously experienced (Caswell, Henson, Jensen & Wiley 2008). This trend to provide equal educational opportunities to all has given rise to the establishment of an ever-increasing repository of educational resources that are freely available to faculty members and the worldwide population of people wanting to learn (Wiley, Green & Soares, 2012). Accordingly, these new ways of learning have become a reality that is impossible to ignore in Nigeria and the Social work and development studies profession in Kaduna state.

Review of Related Empirical Studies

According to Butcher (2015), open educational resources refer to "any educational resources that are openly available for use by educators and students, without an accompanying need to pay royalties or licence fees". They are typically made freely available over the Web or the Internet. Their principal use is by teachers and educational institutions support course development, but they can also be used directly by students. OERs include full courses, course materials, modules, textbooks, streaming videos, tests, software, technical papers and any other tools, materials, or techniques used to support access to knowledge. These resources have the potential to reduce costs, improve quality, and increase access to educational opportunities (Daniel, 2011; Plotkin, 2010; Wright & Reju, 2012), especially in developing countries where access to quality educational resources are very scarce.

The study of Olufunke and Adigun, (2014) revealed that usage of OER enhanced sharing of common knowledge, course structure, access to quality learning materials and use of real instructional materials online. Also, findings of McKerlich et al. (2013); Butcher (2015); Perez (2017); Wu (2019) revealed that the available OER for students includes scholarly journal access, textbooks, lecture notes, free open peer-reviewed Journal articles among others. Hu, Li, Li and Huang (2015); Wang and Towey (2017) noted that most developing countries are not eager to develop and adopt OER due to lack of funds, technical facilities and cultural awareness required for this new web-based interactive system. Added to this, scholars like Olcott (2012) and De Langen and Bitter-Rijkema (2012); Lawal, Muhammad and Ibrahim (2016), state that the lack of a sustainable revenue source is one of the biggest limitations of OER business models. Most of the existing successful OER projects have been financially supported by government agencies, universities, foundations and other external bodies (Olcott, 2012).

Furthermore, it is believed that OER will bring phenomenal changes to higher education globally (Hu et al., 2015; Nipa and Kermanshachi, 2018) and yield higher cost savings for students than the traditional textbook system (Dewey, Salem, Davidson, Aebli,

Domico, & Falke 2016). OER provides the user with three kinds of resources, namely learning content, tools, and implementation. Learning content includes courseware, modules, journals, etc. Tools include software that enables users to use, reuse, deliver, search, and organize learning content. Implementation resources include property license and acknowledgement to promote publishing and use of open materials (Hu et al., 2015). Similarly, Pete, Mulder and Neto (2017) found significant digital differentiation among lecturers and students at urban versus rural universities in terms of their proficiency and accessibility to OER.

Added to this, the study of Hu et al., (2015); Nyamwembe et al., (2018); Shams et al., (2020) revealed that difference exists in utilization of OER among students and the difference in utilization were attributed to experience with OER, challenges involved with student awareness, content, interface, and environment. However, as revealed by the study of Olufunke and Adigun, (2014) that usage of OER enhanced sharing of common knowledge, course structure, access to quality learning materials and use of real instructional materials online.

Also, Akomolafe and Olajire (2014) noted that there is the moderate use of OER among undergraduates among students. They make use of the internet to access learning resources in various forms such as video, audio and texts to support learning activities. However, there is seems to be a low percentage of the level of usage of Open Educational Resources as revealed in Komineas & Tassopoulou, (2016). Similarly, Nwana, Egbe, and Ugwuda, (2017); Issa et al., (2020); Itasanmi, (2020) revealed that even though there seems to be high awareness of educational resources among undergraduates, there is very low utilization of these resources for learning. It is pertinent to note that none of these studies conducted focused on availability, accessibility and utilization of OER amongst students of social work and development in Kaduna state. Thus, the study fills this gap in research.

Statement of the Problem

As the 21st century unfolds, new challenges and opportunities are arising due to changes in the global environment. To catch up with the new global trend, Social work and development studies have been enriched in content with innovative pedagogies, theories and practice to produce functional social workers and welfare officers capable of solving social problems in our modern society. Thus, to achieve this, there is a need for students to have access to up-to-date learning materials to stand the test of time.

However, most parents, students and institutions of higher learning cannot provide all the required learning materials. This has been one of the major reasons for the development of Open Educational Resources in the 21st century with the proliferation of ICTs. Consequently, scholars and researchers have developed a lot of materials in form of textbooks, book chapters, youtube, patents, journal articles and a lot more for free and available for use to students and researchers across the globe. Though, the extent to which these materials are available, accessible and utilized by students of social work and development studies in Kaduna state is still unknown through research. Thus, the study sought to this gap.

Research Questions

The following research questions were answered:

1. What are the responses of students on the availability of OER for learning Social Work/ Development Studies in SICHST, Makarfi and KADPOLY?
2. What are the responses of students on the accessibility of open educational resources for learning Social Work/ Development Studies in SICHST, Makarfi and KADPOLY?
3. What are the responses of students on the utilization of OER for learning of Social Work/ Development Studies in SICHST, Makarfi and KADPOLY?

Objectives of the Study

The study aimed to explore the use of Open Educational Resources [OER] amongst students of social development in Kaduna state. The study objectives are to:

1. find out the responses of students on the availability of OER for learning Social Work/ Development Studies in SICHST, Makarfi and KADPOLY.
2. examine the responses of students on the accessibility of open educational resources for learning Social Work/ Development Studies in SICHST, Makarfi and KADPOLY
3. find out the responses of students on the utilization of OER for learning of Social Work/ Development Studies in SICHST, Makarfi and KADPOLY.

Methodology

A descriptive survey research method was adopted. The population of the study consists of all students in the department of social development at Shehu Idris College of Health Sciences and Technology, Makarfi (SICHST, Makarfi) and those at Kaduna State Polytechnic (KADPOLY) of 2019/2020 and 2020/2021 academic session, totalling one thousand and fifth-three (1053). Out of this population, a sample of four hundred students (400) was selected using simple and proportionate random sampling techniques. The questionnaire titled "Use of Open Educational Resources amongst Social Development Students (UOERDES) was used for data collection. The instrument was based on modified four (4) Likert scales, that is, VHE- Very High Extent; HE- High Extent; LE- Low Extent; VLE- Very Low Extent. The instrument was validated by statisticians and language experts in the Faculty of Education, A.B.U., Zaria. To ascertain the content validity of the instrument, a draft copy of the questionnaire was submitted to one (1) statistician and two (2) language experts in the Faculty of Education, A.B.U., Zaria who critiqued the instrument and made input on the construct and face validity of the instrument. All the observations made were incorporated into the final copy of the instrument produced. The instrument was piloted on thirty (30) 200 level of Social development students at Jigawa state Polytechnic, who are not part of the target sample for the study. Cronbach Alpha statistics was used to measure the internal consistency of the instrument. Reliability indexes of 0.81 to 0.87 were obtained respectively. Mean scores and standard deviations were used to answer the research questions.

Results

Discussion of Findings

Out of the four hundred (400) distributed, a total of three hundred and sixty-seven (367) (91.7%) were retrieved. Therefore, the analysis was based on this.

Research Question I: What are the responses of students on the availability of OER for learning Social Work/ Development Studies in SICHST, Makarfi and KADPOLY?

The descriptive statistics of mean and standard deviations were used to answer this research question. The summary of computation was presented in Table 1.

Table 1: Availability of OER for Learning of Social Work/ Development Studies

Items	Statements	KADPOLY			SICHST, Makarfi				
		Availability (%)	Mean	S.D	Decision	Availability (%)	Mean	SD	Decision
1.	Courseware and modules on the world wide web.	52	2.53	.86	HE	50	2.51	.76	HE
2	Free lecture notes.	54	2.59	.70	HE	59	2.67	.99	HE
3	Free Youtube, interactive games/ simulations, streaming videos, educational software and other interactive media.	71	3.19	.44	VHE	78	3.34	.72	VHE
4	Open Project/thesis/dissertations.	43	2.22	.65	LE	79	3.36	.48	VHE
5	Open assignments/ solved questions, quizzes and tests on the world wide web.	52	2.60	.92	HE	45	2.37	.79	LE
6	Peer-reviewed journal articles and other publications.	86	3.78	.84	VHE	79	3.36	.75	VHE
7	Free slides, class presentations and patents.	83	3.72	.74	HE	68	3.05	.25	HE
8	Online free Audio- podcasts.	43	2.22	.60	LE	43	2.22	.17	LE
9	Online books or book chapters.	33	1.90	.42	VLE	38	2.28	.81	VLE
10.	Open classroom activities	46	2.34	.48	LE	42	2.43	.57	LE
Average (%)/ Cumulative Mean		56.3	2.71			58.1	2.66		

VHE- Very High Extent; HE- High Extent; LE- Low Extent; VLE- Very Low Extent

Table 1 depicted that, courseware and modules on Social Work/ Development studies are rated 52% available for use in KADPOLY, while, they were rated 50 % availability in SICHST, Makarfi. Also, KADPOLY students agreed that up to 54% of free lecture notes on Social work/ development studies are found online, while those s SICHST, Makarfi reported 59%. As regards free YouTube, interactive games/ simulations, streaming videos, educational software and other interactive media, 71% availability was reported

according to students in KADPOLY and 78% for SICHST, Makarfi. The students at KADPOLY reported about 52% availability of open assignments/solved questions, quizzes and test, while those students in SICHST, Makarfi recorded below average. The study showed high availability (86 %) of peer-reviewed journal articles and other publications on Social work/ development studies at KADPOLY, while 79% of availability was recorded at SICHST, Makarfi. 83 % of availability was recorded for free slides, class presentations and of KADPOLY and SICHST, Makarfi recorded a low level of availability of open educational resources on items 4, 8, 9 and 10. This implies that free Youtube, interactive games/ simulations, streaming videos, educational software and other interactive media; Free slides, class presentations and patents; Online free Audio- podcasts; online books or book chapters; and open classroom activities on Social Work/Development Studies are not open or available for use amongst the students. The cumulative mean for students at KADPOLY was 2.71, while those at SICHST, Makarfi were 2.66. This showed that the cumulative means of the two groups were greater than the decision means of 2.50. On the other hand, on average, the level of availability of OER for students in KADPOLY was 56.3 %, while, those at SICHST, Makarfi was 58.1%. Hence, the overall average availability of OER was 57.2%. This implied that the availability of OER is average for students of Social development/ Social work for both institutions.

Research Question 2: What are the responses of students on the accessibility of open educational resources for learning Social Work/ Development Studies in SICHST, Makarfi and KADPOLY?

The descriptive statistics of mean and standard deviations were used to answer this research question. The summary of the computation was presented in Table 2.

Table 2: Access to OER for learning of Social Work/Development Studies

Items	Statements	Accessibility (%)	KADPOLY			SICHST, Makarfi			
			Mean	S.D	Decision	Mean	SD	Decision	
11	Courseware and modules	43	2.22	.40	LE	50	2.50	.31	HE
12	Online lecture notes.	80	3.70	.38	VHE	65	3.01	.22	HE
13	Youtube, interactive games/ simulations, streaming videos, educational software and other interactive media.	82	3.75	.32	VHE	51	2.56	.31	HE
14	Project/thesis/dissertations on the world wide web.	86	3.78	.36	VHE	52	2.52	.48	HE
15	Open assignments/ solved questions, quizzes and test	56	2.71	.34	HE	52	2.51	.31	HE
16	Open peer-reviewed Journal articles and other publications	91	3.88	.37	VHE	52	2.52	.24	HE



17	Open slides, class presentations and patents.	34	2.33	.75	VLE	30	2.31	.25	VLE
18	Open audio- podcasts	21	1.24	.71	VLE	28	2.22	.17	VLE
19	Open books or book chapters	22	1.26	.70	VLE	29	2.16	.81	VLE
20	Open classroom activities	80	3.38	.38	VHE	67	3.10	.57	HE
Average/ Cumulative Mean		59.5	2.83			47.6	2.54		

VHE- Very High Extent; HE- High Extent; LE- Low Extent; VLE- Very Low Extent

Table 2 presented the level of accessibility of open educational resources in both students at KADPOLY and those at SICHST, Makarfi. Open courseware and modules are accessed up to 50% by students in SICHST, Makarfi, while 43% access is recorded among students in KADPOLY. Access to online lecture notes is 80% for students at KADPOLY and 65% at SICHST, Makarfi. Access to Youtube, interactive games/ simulations, streaming videos, educational software and other interactive media was 80% among students at KADPOLY and 51 % for those in SICHST, Makarfi. The findings indicated that 86% of students at KADPOLY and 52% of those SICHST, Makarfi have access to project/thesis/dissertations on the World Wide Web. Also, 56% of students at KADPOLY and 52% of students at SICHST, Makarfi have access to open assignments/solved questions, quizzes and tests. Open peer-reviewed Journal articles and other publications were found to be highly accessed with 91% of students at KADPOLY and 52% of students in SICHST, Makarfi. Similarly, the students at KADPOLY were found to have 80% access to open classroom activities, while, 67% was found at SICHST, Makarfi.

However, access to open educational resources on items 11, 17, 18 and 19 were accessible to a very low extent in KADPOLY and SICHST, Makarfi. This implied that students rarely or never have access to open educational resources such as Open slides, class presentations, patents, audio podcasts, books or book chapters on Social work and development studies. The cumulative mean for students at KADPOLY was 2.83, while those at SICHST, Makarfi were 2.54. This showed that the cumulative means of the two groups were greater than the decision means of 2.50. On the other hand, on average, the level of accessibility of OER for students at KADPOLY was 59.5%, while, those at SICHST, Makarfi was 47.6%. Hence, the overall average of accessibility to OER was 53.5%. This implied that students at KADPOLY have more access to OER than those in SICHST, Makarfi.

Research Question 3: What are the responses of students on the utilization of OER for learning of Social Work/ Development Studies in SICHST, Makarfi and KADPOLY? The descriptive statistics of mean and standard deviations were used to answer this research question. The summary of the computation was presented in Table 3.

Table 3: Utilization of OER for learning of Social Work/Development Studies

Items	Statement	KADPOLY			SICHST, Makarfi				
		Utilization (%)	Mean	S.D	Decision	Utilization (%)	Mean	SD	Decision
21	Courseware and modules	76	3.66	.86	VHE	53	2.58	.31	HE
22	Open lecture notes.	26	1.37	.87	VLE	21	1.24	.72	VLE
23	Open Youtube, interactive games/ simulations, streaming videos, educational software and other interactive media.	80	3.70	.71	VHE	65	3.00	.31	VHE
24	Open Project /thesis/ dissertations.	57	2.66	.48	HE	54	2.59	.48	HE
25	Open assignments/ solved questions, quizzes and tests.	25	2.13	.64	VLE	34	2.33	.31	LE
26	Open peer-reviewed Journals articles and other publications.	25	2.12	.87	VLE	24	2.11	.66	VLE
27	Open slides, class presentations and patents.	69	3.13	.85	VHE	53	2.59	.25	HE
28	Audio- podcasts.	70	3.15	.36	VHE	72	3.56	.17	VHE
29	Open books or book chapters.	61	2.90	.88	VHE	62	2.94	.26	VHE
30	Open online classroom activities.	30	1.74	.97	VLE	25	2.13	.57	VLE
Cumulative Mean		51.9	2.65			46.3	2.51		

VHE- Very High Extent; HE- High Extent; LE- Low Extent; VLE- Very Low Extent

Table 3 showed that students of KADPOLY utilize 76%, while, those at SICHST, Makarfi 53% of courseware and modules. The utilization of open you-tube, interactive games/ simulations, streaming videos, educational software and other interactive media were very high (80%) for students at KADPOLY and lower (65%) at SICHST, Makarfi. The level of utilization of Open Project /thesis/ dissertations was found to be high among students at KADPOLY (57%) compared to 54% of those in SICHST, Makarfi. Similarly, the study found that open slides, class presentations and patents were utilized among students at KADPOLY (69%) and SICHST, Makarfi (53%). However, the utilization of audio podcasts was higher among students at SICHST, Makarfi (72%) compared to students in KADPOLY (70%). The same was experienced in the utilization of open books or book chapters which

established that students in SICHST, Makarfi utilize up to 62% compared to students at KADPOLY with a 61% level of utilization.

However, a low level of utilization was found in items 22, 25, 26 and 30. In other words, the analysis implied that students in KADPOLY and those at SICHST, Makarfi rarely or never used open educational resources like lecture notes /lesson plans, assignments/ solved questions, open peer-reviewed Journals articles and other publications, quizzes and tests, slides, class presentations and patents, and online classroom activities. The cumulative mean for students at KADPOLY was 2.65, while, those at SICHST, Makarfi were 2.51. This showed that the cumulative means of the two groups were greater than the decision means of 2.50. On the other hand, on average, the level of accessibility of OER for students at KADPOLY was 51.9%, while, those at SICHST, Makarfi were 46.3%. Hence, the overall average utilization of OER was 49.1%. This implied that students KADPOLY utilize OER than those at SICHST, Makarfi.

Discussion of Findings

This section presented the discussion of findings-based research questions developed for study as follows:

Availability of OER for learning of Social Work/ Development Studies

The study found that there was the availability of OER such as courseware and modules, free lecture notes, free YouTube, interactive games/ simulations, streaming videos, educational software and other interactive media, open assignments/solved questions, quizzes and tests, open peer-reviewed journal articles and other publications, open slides, class presentations on social work/ development studies in KADPOLY and SICHST, Makarfi. This agreed with the findings of McKerlich et al. (2013); Butcher (2015); Perez (2017); Wu (2019) which revealed that the available OER for students includes scholarly journal access, textbooks, lecture notes, free open peer-reviewed Journal articles among others.

However, the study found a low level of availability of OER such as Youtube, interactive games/ simulations, streaming videos, educational software and other interactive media; Free slides, class presentations and patents; Online free Audio- podcasts; online books or book chapters; and open classroom activities for use amongst the students. Thus, the low availability of these materials could be attributed to the fact developing countries such as Nigeria do not pay much attention to developing OER materials, since, it does not generate income for producers, like the way, textbooks and other reading materials do. To support this submission, Hu, Li, Li and Huang (2015); Wang and Towey (2017) noted that most developing countries are not eager to develop and adopt OER due to lack of funds, technical facilities and cultural awareness required for this new web-based interactive system. Also, scholars like Olcott (2012) and De Langen and Bitter-Rijkema (2012), stated that the lack of a sustainable revenue source is one of the biggest limitations of OER business models. Most of the existing successful OER projects have been financially supported by government agencies, universities, foundations and other external bodies

(Olcott, 2012). Furthermore, the study found that on average, the level of availability of OER for students in KADPOLY was lower (56.3 %) compared to that of SICHST, Makarfi (58.1%). Thus, the level of availability was found to be average for social development/ social work students in both higher institutes of learning.

Accessibility of OER amongst students of Social Development/Social Work

The study found that social development/ social work students have access to open courseware and modules, online lecture notes, Youtube, interactive games/ simulations, streaming videos, educational software and other interactive media, project/ thesis/ dissertations, assignments/solved questions, quizzes and test, peer-reviewed journal articles and classroom activities. Thus, access to OER would help students in reducing the cost for purchase of learning materials, such as handouts, textbooks among others. This is in line with the submission of It is believed that OER will bring phenomenal changes to higher education globally (Hu et al., 2015; Nipa and Kermanshachi, 2018) and yield higher cost savings for students than the traditional textbook system (Dewey, Salem, Davidson, Aebli, Domico, & Falke 2016). OER provides the user with three kinds of resources, namely learning content, tools, and implementation. Learning content includes courseware, modules, journals, etc. Tools include software that enables users to use, reuse, deliver, search, and organize learning content. Implementation resources include property license and acknowledgement to promote publishing and use of open materials (Hu et al., 2015).

However, the study found that students rarely or never have access to open educational resources such as Open slides, class presentations, patents, audio podcasts, books or book chapters on Social work and development studies. In other words, these OER are accessible to a low extent. Furthermore, the level of accessibility to OER was found to be average in the two institutions. Nevertheless, students at KADPOLY have more access to OER than those in SICHST, Makarfi. Probably this is due to the difference in location (urban and rural) of the two institutions. This finding reaffirmed the research revelation of Pete, Mulder and Neto (2017) which found significant digital differentiation among lecturers and students at urban versus rural universities in terms of their proficiency and accessibility to OER.

Utilization of OER amongst students of Social Development/Social Work

On the level of utilization of OER, the study revealed that the students of KADPOLY and SICHST, Makarfi utilize OER such as open courseware and modules, youtube, interactive games/ simulations, streaming videos, educational software and other interactive media, project /thesis/ dissertations, slides, class presentations and patents, audio-podcasts and books or book chapters. However, the utilization of these OER among students of both institutions varies, as students of KADPOLY had the opportunity to utilize the materials more than their counterparts at SICHST, Makarfi. This collaborates with the findings of Hu et al., (2015); Nyamwembe et al., (2018); Shams et al., (2020) which revealed that differences exist in utilization of OER among students and the difference in utilization were attributed to experience with OER, challenges involved with student

awareness, content, interface, and environment. However, as revealed by the study of Olufunke and Adigun, (2014) that usage of OER enhanced sharing of common knowledge, course structure, access to quality learning materials and use of real instructional materials online.

Also, the findings revealed that students in KADPOLY and those at SICHST, Makarfi rarely or never used open educational resources like lecture notes /lesson plans, assignments/ solved questions, open peer-reviewed Journals articles and other publications, quizzes and tests, slides, class presentations and patents, and online classroom activities. Hence, the average level of utilization of OER in the two institutions was low. This concurred with the submission of Akomolafe and Olajire (2014) who noted that there is a moderate use of OER among undergraduates as a large number of students make use of the internet to access learning resources in various forms such as video, audio and texts to support learning activities. However, there is seems to be a low percentage of the level of usage of Open Educational Resources as revealed in Komineas & Tassopoulou, (2016). Similarly, Nwana, Egbe, and Ugwuda, (2017); Issa et al., (2020); Itasanmi, (2020) revealed that even though there seems to be high awareness of educational resources among undergraduates, there is very low utilization of these resources for learning.

Conclusion

Based on the findings from the study, it could be concluded that the level of availability and accessibility of OER was average, while, the rate of utilization was low. This implies that the available OER on Social Work and development studies are not effectively utilized, despite, the average availability and accessibility of the materials by the students. The reasons for underutilization could be insufficient data, poor internet services, inadequate ICTs such as computers, Smartphone, wifi, institutional policy among others. Furthermore, OER such as open Audio-podcasts, books or book chapters and classroom activities are not much available, but, the ones available are well accessed and utilized by the students, with exception of, open classroom activities which recorded a high level of accessibility but low level of utilization.

Recommendations

Based on the findings, the following were recommended to improve the availability, accessibility and utilization of OER amongst students of Social Work and Development Studies in Kaduna state:

1. Lecturers and scholars in the field of social work and development studies should as a matter of urgency engage in the development of open Audio- podcasts, books or book chapters and classroom activities. This will make the materials available for students' use and knowledge development in the state.
2. Heads of Institution should provide ICTs and internet services to enable students of social work and development studies to have adequate access to OER such as open slides, class presentations and patents, audio- podcasts and books or book chapters.

Access to these materials will enable the students to engage in independent study as well as mastery of the theory and practical aspects of the discipline.

3. The Kaduna State Ministry of Education, lecturers and heads of institutions should organise programmes that will enable students to know how to utilize the available OER. This will reduce the cost of buying reading materials amongst students and as well lessen the burden on the part of parents or guardians.

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