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The Role of Libraries and Librarians in Open Educational Resources in Tanzania: the Case of Selected Public University Libraries

Abstract

This paper examined the Role of Libraries and Librarians in Open Educational Resources (OER) in selected public university libraries in Tanzania. Specifically, the study sought to find out the level of OER awareness among librarians and the role played by libraries and librarians in OER in Tanzania. The study also identified challenges encountered by librarians in promoting access and use of OER. Fifty two librarians of different ranks and academic qualifications from four public university libraries participated in this study. These were selected using simple random sampling techniques. Data was collected through a self administered questionnaire and documentary review. Data collected was analyzed using Excel and SPSS version 18.0. The findings show that librarians are aware of the concept OER and also play multiple roles in promoting awareness on OER and its integration in university websites to facilitate their accessibility and use. The study further revealed that limited awareness on existing OER and lack of policy guidelines on the use of OER are major challenges facing librarians in promoting access and use of OER. The study recommends more OER awareness creation campaigns and formulation of institutional OER policies.

Keywords

OER, Libraries, Librarians, Tanzania, Open Educational Resources, Open Access, University, OA.

INTRODUCTION

The development and application of Information and Communication Technologies (ICT) has changed the way information is generated, stored and accessed by users. The pervasive nature of ICT facilitates publishing, distribution, access and use of information resources. Information which was only available in print format is now available in digital format as well. Besides, ICT development has made it possible to develop affordable and accessible Open Educational Resources (OER) which are key to equitable and inclusive learning. According to UNESCO (2002) OER are any type of educational materials that are in the public domain or are introduced with an open license. UNESCO (2002) further posits that, the nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. They include textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation. In fact, OER have enabled marginalized and underprivileged communities of students, entry into the main stream of education and learning. Given the escalating cost of books in many institutions, OER forms an important source of information in supporting teaching, learning and research. Following the above argument, Colson, Scott & Donaldson (2017) assert that, one of the solutions to reduce the high and rising costs of textbooks and instructional materials is to replace them with OER which are free and make education more affordable to students. Smith & Lee (2017) regard OER as an important method of providing access to quality information and enhancing the teaching and learning experience for both faculty and students. However, this can truly be achieved with the engagement of librarians and libraries. Davis et al. (2016) pointed out that libraries as strong advocates for providing patrons with free or low cost access to information are seizing the OER opportunity. Libraries also provide expertise on OER, in particular, through the Institutional Repository (Martin 2010; Mitchel and Chu 2014; Okamoto 2013).

Apparently, for OER to be accessed and used effectively the libraries and librarians must play crucial roles which include developing, advocating and managing OER (Smith & Lee, 2017). This is due to the fact that

over the years librarians through their trainings have gained a lot of experience in handling information and affording access to patrons. With a history of collecting high quality materials for both teaching and research, Librarians are well positioned to work with faculties seeking to incorporate OER in their courses (Davis et al., 2016). Actually, librarians should be viewed as important players in the promotion, integration, use and management of OER. Smith & Lee (2017) assert that many academic librarians have spearheaded programs to support the adoption and production of OER at their institutions. The experience shared by Smith & Lee (2017) augur well with what the author of this paper did at the Open University of Tanzania in collaboration with OER Africa. As a Librarian, I had an opportunity to participate fully in the process of raising awareness among academic staff, students and the University Management on OER, OER Policy formulation, editing and assuring the quality of Digital Fluency Open Coursewares developed at the University, hosting and integrating OER in the University website as well as in the University's Institutional Repository.

Librarians are excellent at facilitating effective use of OER through information literacy training as they do for other resources. Woodward (2017) argued that in order to promote establishment and usage of OER, Libraries and librarians are positioned to champion the OER adoption movement given their pervasive scope and specialized skills. Kleymeer et al. (2010) opined that librarians have relevant skills which can benefit OER programmes. Their philosophical support for access to information, their existing relationship with both faculties and students and their outreach and instructional support experience make librarians the natural partners in OER initiatives and voice for more affordable learning resources (Okamoto 2013; Mitchell & Chu, 2014). In Tanzania, the interest on OER in higher learning institutions has started to gain ground because of their importance in education establishments. Many studies on OER have started to emerge but they focus mainly on general issues on OER and not on the role played by libraries and librarians in OER initiatives (Nihuka et al., 2014, Samzugi & Mwinyimbegu, 2013; Mtebe & Raisamo, 2014; Mwamlangala, 2015; Muganda et al. (2016). Therefore, the present study was designed to examine the role played by librarians and libraries in OER.

STUDY OBJECTIVES

- (i) Assessment of Librarians' level of awareness on OER.
- (ii) Investigate techniques used by libraries and librarians in promoting access to and use of OER
- (iii) Identify challenges encountered by librarians in promoting access and use of OER in Tanzania's Public University Libraries.

Based on these objectives, this study was directly concerned with bridging this gap in knowledge. Guided by this view, the study attempted to analyse significant contributions that are anticipated - to improve best practices on OER among librarians in Tanzania.

LITERATURE REVIEW

The emergence of OER has generated interest among higher learning institutions worldwide. Perhaps the most important opportunity for OER is in the global free exchange of knowledge as they render not only accessibility but re-usable to by teachers in different formats (McGreal, 2017). Several literatures on OER were reviewed to gain more insights on the aspect of libraries and librarians roles in OER.

Librarians Awareness on OER

A number of studies have been conducted worldwide to determine the level of librarians' awareness and involvement in OER. A study conducted by Kassahun & Nsala (2015) on the level of awareness among academic librarians on Open Access resources to support reference services in private institutions of higher learning in Gaborone, Botswana, revealed that only a small percentage (33%) of academic librarians were aware of open access. A study by Bueno-de-la-Fuente et al. (2012) revealed a significant lack of awareness on both OER initiatives with regards to library activities and from libraries on resources released by OER

initiatives. These studies provide very useful information on the roles played by librarians, however, they were conducted outside Tanzania and thus their findings cannot be generalized. This study was conducted in the context of the Tanzanian environment and the purpose was to create awareness among Librarians on OER.

OER Integration and Promotional Strategies in Libraries

The launching and use of OER in higher learning institutions is a reality, however, for OER to be effectively utilized they need to be integrated or mainstreamed or made part of the library collection. In view of this, no library can ignore the importance of OER in teaching, learning and research if it has to remain relevant. A study by Davis et al. (2016) established that librarians play advisory roles to faculties, influencing integration of OER in their courses. Suggestions made ranged from building collections or lists of OER available to their integration in academic programmes.

Robertson (2010) investigated the possible roles of academic libraries in promoting, supporting and sustaining Institutional Open Educational Resources initiatives. The study revealed that librarians can offer advice to institutions, academic staff and students because they are engaged in OER through metadata and resource description, information management and resource dissemination, digital or information literacy training (finding and evaluating OER), subject-based guides for finding resources, managing intellectual property rights and promoting appropriate open licensing.

Lakshmana (2011), in a study entitled “Open Educational Resources in Developing Nations: Lessons from an Open Online Course” is of the view that educators, librarians and education policy makers should be actively involved in using open technology tools like OER to build, strengthen, promote and share free educational resources taking into account the growing illiterate population in developing countries. For instance in Tanzania, literacy rates have fallen from 90.4% in 1986 to 67.8% in 2017 (Baregu, 2017). In order to bridge the illiteracy gap the use of OER should be considered since the materials are freely available with no conditionalities attached to their usage.

In a study by Bueno-de-la-Fuente et al. (2012, p.7), it was revealed that the main areas of library’s involvement in OER initiatives are: description and classification, management, preservation, dissemination and promotion of OER. The authors add that in order to support these activities, librarians provided expertise in information science areas, especially: metadata standards, vocabularies, indexing and classification, information retrieval, information literacy, and repository technology and management p. 7. Peet (2016) is of the view that librarians can also support the adoption of OER as library resources in their respective institutions. Bueno-de-la-Fuente et al. (2012) insist that academic libraries should play a leading role by providing access to scholarly and educational content in multiple formats and by integrating OER in their collections, selecting and recommending relevant OER for their institutional curriculum and their users. OER promotion strategies employed by librarians include outreach skills, subject based guides (Smith & Lee, 2017), seminars and workshops (Muganda et al., 2016; Hess et al. (2016). Librarians can also orient patrons to free and open access materials through their databases, digital repositories and websites (Martin, 2010).

All these studies indicate that librarians have multiple roles to play in OER undertakings. However, in the context of Tanzania much is not known about the strategies libraries and librarians use to facilitate integration and promotion of OER. This is the gap that this study intended to fill.

Challenges of OER Use and Integration in Libraries

Despite the fact that for centuries libraries and librarians worldwide have supported their users by providing access to properly organized knowledge and its use regardless of format, due to rapid changes brought about by ICT, challenges involving OER still persist. According to Walji (2014) OER challenges facing librarians include limited connectivity, low levels of digital literacy and geographical remoteness. Smith & Lee (2017) observe that, academic librarians also face the challenge of fast changing technology

that requires librarians to consistently upgrade their skill to effectively manage change in order to cope with the changing needs of users and at the same time manage multiple and simultaneous responsibilities. Indeed, to keep pace with the changing innovations in the information environment and age, academic librarians need relevant upgraded skills and competencies.

A number of studies on OER have also been conducted in Tanzania. Mtebe & Raisamo (2014) investigated Perceived Barriers to the Use of Open Educational Resources in Higher Education in Tanzania. They found that lack of access to computers and the internet, low internet bandwidth, absence of policies, and lack of skills to create and/or use OER are the main barriers to effective usage of OER in Higher Education Institutions in Tanzania.

Mtebe & Raisamo (2014) in another study on Challenges and Instructors Intention to Adopt and Use Open Educational Resources in Higher Education in Tanzania found that effort, expectancy had significant positive impact on instructors' intention to adopt and use OER. They also found factors constraining adoption and use of OER to include inadequate ICT infrastructure, low level of awareness of copyright issues related to OER implementation, irrelevance of some OER to curricula and lack of awareness on existing OER. Nihuka et al. (2014) examined OER Initiatives at the Open University of Tanzania: Challenges and Lessons Learned and found that even though interesting and useful, the process of designing and developing OER is a major challenge and requires team work.

Mwamlangala (2015) reported on the challenges to effective adaptation and use of OER at both Open University of Tanzania and the Shanghai Open University to include inadequate ICT infrastructure, low level of awareness on intellectual property rights and copyright issues, lack of OER policies, curriculum incompatibility, inadequate bandwidth and lack of investment resources in OER. Muganda et al. (2016) study on Analytical Insights on the Position, Challenges, and Potential of Promoting OER in Open and Distance Learning Institutions in Africa, revealed that Open University of Tanzania staff are willing to engage in OER but have limited awareness, skills and competencies in the creation, integration and use of OER. Muganda et al. (2016) further, add that knowledge and strategies to promote effective development, use, integration, hosting and dissemination of OER within the context is an important undertaking. Similarly, Mushi & Muganda's (2013) study on Open Education Resources (OER) for National Development in Tanzania concluded that OER have great potential to national development but need proper planning, financial, infrastructural support and capacity building to overcome incumbent challenges. Samzugui & Mwinyimbegu (2013) investigated Accessibility of Open Educational Resources for Distance Education Learners at the Open University of Tanzania. The study revealed that staff and students at OUT are aware of the OER and the major use of information found in OER is for self-learning. The study also identified limitations of OER as library users' dependency on librarian assistance in accessing resources, low internet connectivity, unreliable power supply and inadequate number of computers.

According to Mtebe & Raisamo (2014), there is an increasingly rapid development and use of OER in higher education institutions (HEIs) in developing countries. However, despite the acceptance and use of OER in higher learning institutions in Tanzania yet the role played by libraries and librarians and the value of their involvement is not clearly known. Therefore this study was designed to find out the role played by libraries in the field.

Studies by (Nihuka et al., 2014; Samzugui & Mwinyimbegu 2013; Mtebe & Raisamo 2014; Mwamlangala 2015 and Muganda et al., 2016) focused on various aspects of OER as stipulated above, however, these studies did not address the central roles played by libraries and librarians in OER in Tanzania. This is the gap that motivated this study.

RESEARCH METHODOLOGY

This study was conducted in Dar es Salaam, Tanzania at Muhimbili University of Health and Allied Sciences (MUHAS), Ardhi University (ARU), University of Dar es Salaam (UDSM) and the Open

University of Tanzania (OUT) and involved librarians from the four academic libraries. These university libraries were chosen because they support their parent institutions whose activities revolve around teaching, learning, research and community services; therefore, it is their responsibility to collect information in various formats such as OER to meet the information needs of their users. Moreover, librarians were included because they are custodians of information and once they are comfortable with OER they are likely to advocate their usefulness to their clientele and university management. The target population for the study was 100 library staff drawn from the four universities. Simple random sampling technique was used to select 80 librarians of different ranks. Data was collected through self-administered structured questionnaire containing both open and closed ended questions. The study also adapted some of the questions developed by Roberson (2010). 80 questionnaires were distributed to respondents. A total of 52 questionnaires (65%) were filled out and returned. Secondary data was obtained through documentary review both published and unpublished documents, books, journal articles, annual reports and research reports were reviewed and major points summarized.

A Statistical Package for Social Scientists (SPSS) version 18.0 was used to generate frequency tables and percentages. Collected data were coded in meaningful logical themes and information and presented in tables, graphs, charts and frequency tables. Qualitative data was descriptively analyzed and organized around broad themes as they emerged.

FINDINGS AND DISCUSSION

Participating Universities

A total of four public university libraries were chosen to participate in the study, Table 1. Public universities in Tanzania are believed to have the required ICT infrastructures which are key in offering access to OER. Besides, the universities were easily accessible to the researcher.

Items N = 52	Frequency	Percentage
Open University of Tanzania (OUT)	15	28.9
University of Dar es Salaam (UDSM)	19	36.5
Ardhi University (ARU)	6	11.5
Muhimbili University of Health and Allied Sciences (MUHAS)	12	23.1
Total	52	100.0

Table 1: Name of University

Source: Survey Data, 2018

Background Information of Respondents

In order to capture views and avoid biasness, both sexes were involved. Out of the 52 respondents 29 (56%) were males and 23 (44%) were female. The data shows that there are more men in the field of librarianship today than previously thought. This conforms to a study by Wema and Ndumbaro (2012). The study also involved librarians with different levels of academic qualifications. Academic qualifications play an important role in selecting relevant information resources to support teaching, learning and research. Such information includes OER. Findings show that 20 (39%) Librarians have Masters Degrees, 11 (21%) have Bachelor Degrees, (11 (21%) Diplomas, 10 (19%) have PhDs and only 1 (2%) is an Associate Library Professor. 12 (23%) are in the rank of Librarians, 8 (15%) Assistant Librarians, 19 (36) Library Officers, 2 (4%) ICT personnel and 11 (21%) were Library Assistants, Figure 1. Library staff with different professional expertise, sex and educational qualifications were involved to

ensure that all tasks related to OER are well captured. Thus most respondents are either graduates or postgraduates. The results provided indicate respondents have adequate skills and experience in handling a variety of information formats that satisfy information needs of users. This includes OER which forms part of library collections.

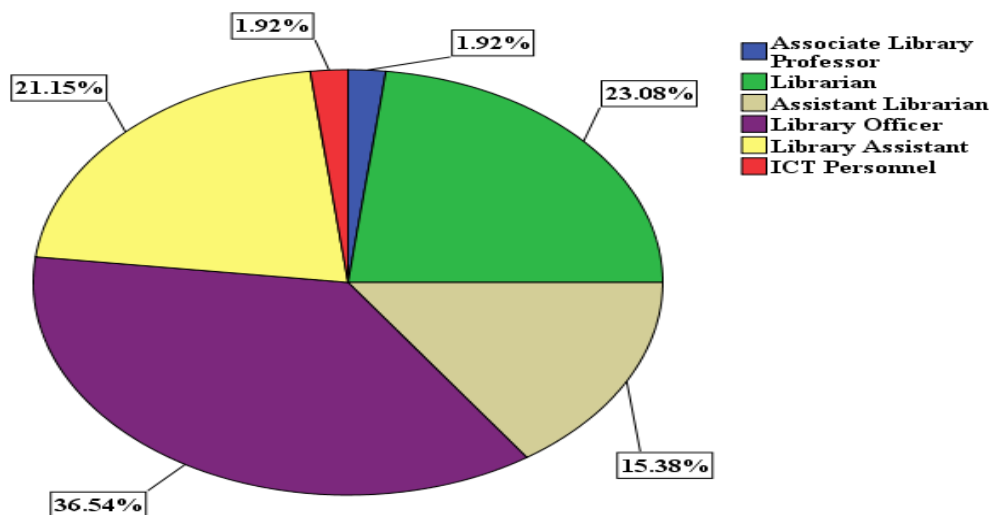


Figure 1: Designation of Respondents

Source: *Survey Data, 2018*

Librarians level of Awareness on OER

Open Educational Resources in many developing countries is a new concept. For librarians and users to make effective use of OER they need to be familiar with the terminology. In order to establish their level of awareness on the OER concept, respondents were asked to indicate if they are aware of the term “Open Educational Resources”. Findings show that 22 (42%) of respondents said they are aware of the term open educational resources, 14 (26%) said they are highly aware, 13 (25%) said slightly aware and 3 (6%) said they are not aware of OER, Figure 2. These findings indicate that at least a majority of librarians are aware of the term of OER. The findings corroborate those of Yuan et al. (2008) who state that OER have gained increased acceptance because of their potential and promise to obviate educational boundaries and to promote life-long learning and personalized learning. This is a very encouraging trend as librarians who are custodians of information are highly aware of OER even though it is a new concept in the field of library and information science and particularly so in developing countries. Despite this encouraging trend, there is high need to sensitize stakeholders especially the 6 percent who said they are not aware of OER and its benefit potentials. The OER phenomenon should reach all key players in the information sector.

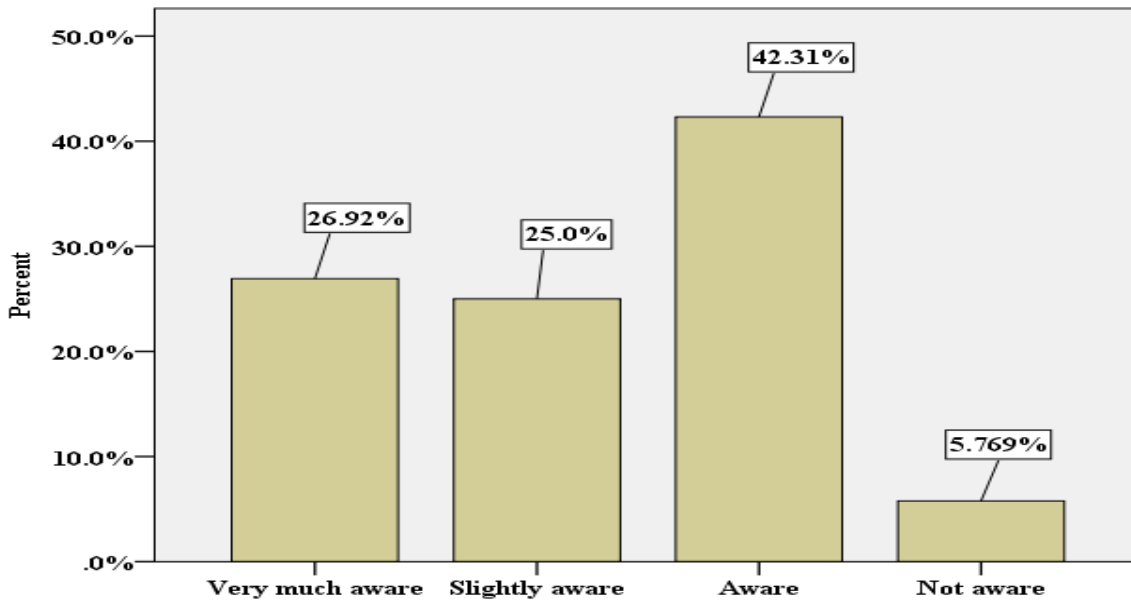


Figure 2: Librarians Awareness on OER

Source: *Survey Data, 2018*

OER Hosted in Public University Libraries in Tanzania

For Open Educational Resources to be effectively used they must be collected, organized, stored and disseminated to a wider audience for wider usage. The development of ICT has facilitated the hosting of OER on library websites and institutional repositories which serve as information gateways. Respondents were asked to mention if they do host OER. 26 (50%) said they do and 26 (50%) said they do not host OER. The fact that 50% of the surveyed universities host OER and the other 50% do not, clearly indicates that as a country there is an urgent need to sensitize universities through the Consortium of Tanzania University and Research Libraries (CORTUL) management on the critical role played by OER in teaching, learning and research. For example CORTUL should include the issue of OER on their agenda and regular meetings. Respondents were further asked to mention the type of OER they host, 24 (45%) of the respondents said African Virtual University (AVU), 17 (32%) MIT OCW, 17 (32%) said OER Africa, and 25 (47%) mentioned Open Learn Link, MERLOT and TESSA 15 (28%) each. It is worth noting that some of the hosted OER involved local experts during their preparation such as AVU and TESSA which contain information emanating from Africa and are compatible to respective universities' curriculum. In a quest to validate information obtained from questionnaires, the researcher visited the website of each selected university library to get details. In this exercise, it was revealed that, UDSM and MUHAS have links to Open Access databases; OUT hosts a variety of OER and ARU website was not accessible at the time this study was conducted because it was undergoing maintenance. These findings imply that OER are part and parcel of the learning resources that public universities embrace. This is supported by Davis et al. (2016) who assert that the high cost of textbooks has made librarians more responsive and more involved in the OER movement. It is therefore logical for libraries to seize and exploit the OER opportunity to their advantage. Actually, OER have helped to improve the availability of learning materials in higher institutions in Tanzania thus diminishing the information gap.

Reasons for Hosting OER

Respondents were also asked to indicate reasons for hosting OER in their university libraries. Findings reveal that 40 (22.5%) of the respondents said being available for free, 39 (21.9%) said easy access, 35 (19.7%) said useful up to date reference sources and 29 (16.3%) said they supplement other learning

resources. Based on these responses it can be concluded that libraries host OER to ensure availability and use of leaning resources amid dwindling budget allocations for purchasing learning materials. In addition, OER have enhanced the philosophy of resource sharing. Likewise, hosting OER has increased their visibility and usability to a wider audience.

Librarians’ Roles in Open Educational Resources

Respondents were asked what roles they play in OER. Results show that Librarians have multiple roles to play in OER including promotion 37 (70%), identification 36 (13.8%), guiding users 35 (13.5%), dissemination 34 (13.1%), evaluation 32 (12.3%), collection 31 (11.9%), management 30 (11.5%) and integration 25 (47%), Table 2. The findings are consistent with Robertson's (2010) who stresses that librarians must also have interest in promoting ‘openness’/ open resources; help users describe, discover, manage and use OER. The results imply that academic librarians in Tanzania are more concerned in getting OER utilized compared to other OER activities. This signifies the changing roles of librarians in the new information age. The findings are also in line with those of Bueno-de-la-Fuente et al. (2012) who state that ‘the main areas of librarians’ involvement are: description and classification, management, preservation, dissemination, and promotion of OER p. 7.’ However, there are more roles that librarians can play. Robertson (2010) summarizes these as help in metadata and resource description, information management and resource dissemination, digital or information literacy (finding and evaluating OER), develop subject-based guides for finding resources, managing intellectual property rights and promoting appropriate open licensing.

Items N = 52	Frequency	Percentage
Identification	36	13.8
Collection	31	11.9%
Management	30	11.5%
Integration	25	9.6%
Evaluation	32	12.3%
Dissemination	34	13.1%
Promotion	37	14.2%
Guiding users	35	13.5%

Table 2: Librarians Roles in OER

Source: Survey Data, 2018

Integration of OER in Public University Libraries

Integration is the process of stitching, blending, or fusing together different sub systems into one comprehensive entity (Merriam-Webster, 2018). In a library setting integration entails putting together different items so that there can be smooth coordination and easy access to resources. For example, library services, regulations and resources can all be blended in the library website so that users can have a single access point for a number of resources and services. This can as well be applied to OER. The OUT, UDSM and MUHAS have links to OER on their Websites. In fact, integrating library resources makes the process of searching information easier, thus greater access to library resources. Respondents were asked how they

integrate OER in their collections. 31 (23.7%) said OER are integrated on their library websites, 23 (17.6%) said integrated on the university website, 22 (16.8%) integrated in the library management information system and linked to open access repositories while 16 (12.2%) said integrated OER in their university repositories, Table 3 (Multiple Responses). These findings infer that most libraries (59%) have integrated OER into their library websites. This is because the library website is the most used information gateway by library users. The findings also show that only 16 (30%) integrate OER in their university institutional repositories. This substantiates Bueno-de-la-Fuente et al. (2012) who assert that the rate of OER integration in university repositories is still very low. This defeats the whole purpose of institutional repositories which are geared towards improving visibility and access to information resources, including OER.

Items	N = 52	Frequency	Percentage
Integrated in the Library website		31	23.7%
Integrated in the university repository		16	12.2%
Integrated in the university website		23	17.6%
Integrated in the Library Management Information System		22	16.8%
Library has a link to the repositories		22	16.8%
Prepared List of OER to be integrated in the Reading List		17	13.0%

Table 3: Integration of OER in Libraries

Source: Survey Data, 2018

Techniques Applied by Librarians in Promoting Awareness on OER

Respondents were asked to indicate the techniques they use in promoting awareness of OER. Findings show that the most prominent tool used to promote awareness on OER is the library website 42 (14.6%) and the least used are OER Portal and ELMS (Moodle) both having 17 (5.9%). Other techniques include seminars/workshops 34 (11.8%), library training 38 (13.2%), orientation 36 (12.5%), social media (face book, twitter, blogs) 26 (9.0%), institutional repositories 24 (8.3%), brochures, flyers, posters 29 (10.1%), current awareness services 25 (8.7%), Table 4. The importance of library websites is that they have made it easy to put resources and services in a single access point. The ease of access to educational resources is what makes library websites to be considered as the most useful promotional tool for OER. Indeed, the competitiveness of open access sources relies mostly on their ease of access. The academic library website can support research in higher education through providing access to internet research tools and full text databases such as OER. The library website is therefore an essential digital gate to online information resources as well as services. However, issues of training, seminars and orientation should also be equally encouraged in promoting awareness on OER.

Items N = 52	Frequency	Percentage
(a) Seminars/ workshops	34	11.8%
(b) Library Training	38	13.2%
(c) During Orientation	36	12.5%
(d) Social media (Face book, twitter, blogs)	26	9.0%
(e) Institutional Repositories	24	8.3%
(f) OER Portal	17	5.9%
(g) Library website	42	14.6%
(h) ELMS (Moodle)	17	5.9%
(i) Brochures, flyers , posters	29	10.1%
(j) Current Awareness Services	25	8.7%

Table 4: OER Awareness Promotion Techniques in Libraries

Source: Survey Data, 2018

Techniques for Promoting Access and Usage of OER

There are many ways in which academic libraries promote access and usage of OER. Respondents were asked to indicate techniques they use to enhance access and use of OER. 43 (22.9%) of the respondents mentioned through information literacy training, 42 (22.3%) university website, 34 (18.1%) face to face sessions, 26 (13.8%) Institutional Repository, 27 (14.4%) OER Portal and 16 (8.5%) ELMS Moodle is the least used, Table 5. Based on these findings it can be deduced that information literacy training is the most preferred method used to enhance access and use of OER in public academic libraries in Tanzania. Probably, this is because information literacy training has been mainstreamed in the university libraries as one of the services regularly offered to new users. These may include library orientation, library instructional courses and library manuals and guides. Actually, the role of the librarian is an educator and not a passive custodian of knowledge (Jestin & Parameswari, 2005). The findings portray a positive role played by libraries and librarians in promoting access and use of OER. The findings coincide with those of Robertson (2010) who asserts that ‘One way through which libraries might be involved in OER (and more widely in Open Education) is through extending some of the work they already often do in the provision of information literacy classes to encompass supporting students in selecting and evaluating OER p. 5’.

Items	N = 52	Frequency	Percentage
Through Information Literacy Training		43	22.9%
Through website		42	22.3%
Through face to face sessions		34	18.1%
Institutional Repositories		26	13.8%
OER Portal		27	14.4%
ELMS (Moodle)		16	8.5%
Total		188	100.0%

Table 5: Access and Use Promotion Techniques

Source: *Survey Data, 2018*

Library Involvement in OER

Respondents were asked to indicate areas where the library as an institution is involved in OER. Findings show that 38 (72%) indicated that the library conducts training on OER, 31 (59%) support university OER initiatives, 26 (49%) host OER and 21 (40%) create OER, Table 6 Multiple Responses. Findings indicate that majority of respondents said that libraries are involved in conducting training to help users access OER. Training is very important when it comes to accessing information such as OER because it equips library users with effective lifelong skills in information searching, evaluation and use. Benny (2015) asserts that training is required even though the users are techno savvy since the use of e-resources, OER included, vary from one to another. It goes without saying that, maximum utilization of OER depends very much on information literacy skills of which libraries offer to their users.

Item	N = 52	Frequency	Percentage
Creates OER		21	18.1%
Hosts OER		26	22.4%
Conducts training on OER		38	32.8%
Supports University OER initiatives		31	26.7%

Table 6: Library Involvement in OER

Source: *Survey Data, 2018*

Challenges Encountered by Librarians in OER

In response to the question on challenges faced when dealing with OER, 47 (88.5%) of the respondents said low level of awareness on existing OER even though they are available on websites and institutional repositories. This could be due to lack of techno know how on how to locate the OER and inability to choose from the vast information resources. This consequently deters effective utilization of OER by staff, teachers and students in supporting teaching and learning. Usage of OER requires one to be techno savvy and well equipped with relevant information literacy skills. Other major challenges mentioned are lack of policy guidelines to guide the use of OER 36 (69.2%), inadequate bandwidth 35 (67.3%) and OER not being recommended by lecturers 24 (46.2%), Table 7 Multiple responses. Nonetheless, the fact that (69.2%) of the respondents said lack of policies and guidelines is a major challenge to full utilization of OER should be taken into consideration. Users could feel more confident to use the resource which he/she knows the boundaries of so as to avoid litigation. According to Samzug (2017), the policy is the one that theoretically guides the best practices. As a way forward, there is a need for Universities in Tanzania which do not have in place OER Policy to do so. Actually, lack of awareness on their existence, lack of guidelines, policies on the use of OER, inadequate bandwidth and not being recommended by lecturers are not unique to Tanzania alone but are also common in other learning institutions in other parts of the world (Lakshmana 2011; Kumbar 2014; Walji 2014)

Items N = 52	Frequency	Percentage
Lack of awareness on their existence	46	88.5%
Lack of policy guiding the use of OER	36	69.2%
Inadequate bandwidth	35	67.3%
Not recommended by lecturers	24	46.2%

Table 7: Challenges in OER Promotion and Use

Source: *Survey Data, 2018*

CONCLUSION AND RECOMMENDATIONS

The study findings reveal that a majority of librarians are aware of the OER concept. It is also argued that librarians play multiple roles in OER including promoting awareness, access and use of OER. The study further shows that major tool that librarians use to promote awareness of OER is the University website and integration of OER in library websites and institutional repositories. To enhance access and use of OER, librarians employ information literacy training. The major challenges faced by librarians in dealing with OER include lack of awareness on existing OER due to the speed in which they are generated and lack of institutional policies to guide the ethical use of OER. Based on these findings, the study recommends that, there is a need for Librarians to create awareness among users, teaching staff, university management and the general public on the centrality of OER in academic and research endeavors. This can be done through workshops, seminars, conferences and during orientation. In addition the Consortium for Tanzania Research and University Libraries should include OER in their agenda as a regular item for discussion during their annual and general meetings which bring together librarians. Consequently, academic libraries should use web pages to host and promote OER for easy access and use by their patrons. Additionally, institutional repositories should also be used as promotional tools. The importance of Libraries and Librarians in OER cannot be over emphasized. As a way forward, librarians should consider several courses of action based on the findings of the study.

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