
The role of libraries and librarians in promoting access to and use of open educational resources in Tanzania: the case of selected public university libraries

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Abstract

This paper examined the role of libraries and librarians in promoting access to and use of Open Educational Resources (OERs) in selected Tanzanian public university libraries. Specifically, the study sought to find out the level of OERs awareness among librarians and the role played by librarians in promoting access to and use of OERs in Tanzania. The study also set out to identify challenges encountered by librarians in promoting access to and use of OERs. 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 technique. Data were collected through self-administered questionnaires and documentary review. Data collected were analysed using SPSS version 18.0. The findings show that librarians are aware of the concept OERs and also play multiple roles in promoting awareness on OERs. Integration of OERs in university websites facilitates their accessibility and use. The study further reveals that limited awareness on existing OERs and lack of policy guidelines on the use of OERs are major challenges facing librarians in promoting access to and use of OERs. The study recommends more OERs awareness creation campaigns and formulation of institutional OERs policies.

Keywords: Libraries, librarians, open educational resources, open access, Tanzania,

Introduction

The development and application of Information and Communication Technologies (ICTs) 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 that 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 (OERs) are keys to equitable and inclusive learning. According to UNESCO (2002), OERs are any type of educational materials that are in the public domain or 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. The materials include textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animations. In fact, OERs have afforded marginalized and underprivileged communities of students' entry into the mainstream education and learning.

Given the escalating burden of book costs for many institutions, OERs present an important alternative source of information for supporting teaching, learning and research. As such,

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Colson, Scott and Donaldson (2017) assert that, one way to deal with the high and rising costs of textbooks and instructional materials is to replace them with OERs which are free and make education more affordable to students. Smith and Lee (2017) regard OERs as important media for providing access to quality information and enhancing teaching and learning experiences for both faculty and students. However, optimum usage of these resources for this purpose can only be truly achieved if librarians and libraries are engaged. Davis, Cochran, Fagerheim and Thoms (2016) pointed out that libraries; as strong advocates for providing patrons with free or low cost access to information; are seizing the opportunity presented by OERs. In fact, libraries are also providing expertise on OERs; in particular, through institutional repositories (Martin, 2010; Mitchel & Chu, 2014; Okamoto, 2013).

Apparently, for OERs to be accessed and used effectively, libraries and librarians must play crucial roles which include developing, advocating for, and managing OERs (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 and affording patrons with access to information it. With a history of collecting high quality materials for both teaching and research, librarians are well positioned to work with faculties seeking to incorporate OERs in their courses (Davis et al., 2016). Actually, librarians should be viewed as important players in the promotion, integration, use and management of OERs. Smith and Lee (2017) assert that many academic librarians have spearheaded programs to support the adoption and production of OERs at their institutions. The experience shared by Smith and Lee (2017) augurs well with what the author of this paper did at the Open University of Tanzania in collaboration with OERs Africa. As a Librarian, the author had an opportunity to participate fully in the process of raising awareness among academic staff, students and the University Management on OERs, OER Policy formulation, editing and ensuring the quality of Digital Fluency Open Courseware developed at the University, and hosting and integrating OERs on the University website as well as in the University's institutional repository.

In the same way, Woodward (2017) argued that given their pervasive scope and specialized skills in the OERs adoption movement, libraries and librarians are more championed to promote the establishment and usage of the resources. Kleymeer, Kleinman, and Hanss, (2010) opined that librarians have relevant skills which can benefit OERs programmes. Their philosophical support for access to information, their existing relationship with both faculties and students, their outreach and instructional support experience make librarians the natural partners in OERs initiatives and voice for more affordable learning resources (Okamoto 2013; Mitchell & Chu, 2014). In Tanzania, the interest in OERs among higher learning institutions has started to gain ground because of the resources' importance in education establishments. However, despite the growing availability of these resources, the role that librarians play in promoting their access and use is not known. Availability of information resources alone cannot suffice to satisfy the information needs of users. Awareness about their availability and skills needed to access and navigate various databases are of prime importance. As a matter of fact, librarian can be very helpful with that. As such, the gist of the matter is to find out what librarians do to enhance utilization of OERs. Thus, a link between OERs and librarians has to be established to ensure effective and ethical use of the resources. Many studies on OERs have mainly focused on general issues on OERs and not on the role played by libraries and librarians in OERs initiatives (see Nihuka, Mbwette, & Kihwelo, 2014; Samzugui & Mwinyimbegu, 2013; Mtebe & Raisamo, 2014; Mwamlangala, 2015; Muganda, Samzugui & Mallinson, 2016). Therefore, the present study was

designed to examine the roles librarians play in enhancing access to and utilization of OERs in Tanzania. Specifically the study was guided by the following objectives:

- (i) To assess librarians' level of awareness on OERs;
- (ii) To investigate techniques used by libraries and librarians to promote access to and use of OERs and;
- (iii) To identify challenges encountered by librarians in promoting access to and use of OERs in Tanzania's public university libraries.

Based on these objectives, this study was directly concerned with bridging the gap existing in knowledge regarding the role played by libraries and librarians in this respect. Guided by this view, the study has attempted to analyse significant contributions that are anticipated to improve best practices on OERs among librarians in Tanzania.

Literature review

The emergence of OERs has generated interest among higher learning institutions worldwide. Perhaps, the most important opportunity for OERs is in the global free exchange of knowledge as they render not only accessible, but also re-usable by teachers in different formats (McGreal, 2017).

Librarians' awareness on OER

A number of studies have been conducted worldwide to determine the level of librarians' awareness and involvement in OERs. INTECH (2012), in a study on the role of librarians in an open access world, found that there was an overall moderate level of awareness of open access among the community of librarians. Additionally, a study conducted by Kassahun & Nsala (2015) on the level of awareness among academic librarians on Open Access resources for supporting 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, Robertson and Boon (2012) revealed a significant lack of awareness on both OERs initiatives with regards to library activities and from libraries on resources released by OER initiatives. Alemu, as cited in Dulle (2010, p. 56) sum up that researchers and librarians had very low awareness of Open Access. These studies indicate that there are varying levels of awareness on OERs among librarians.

OER integration and promotional strategies in libraries

The launching and use of OERs in higher learning institutions is a reality. However, for OERs to be effectively utilized, they need to be integrated, mainstreamed, or made part of the library collection. In view of this, no library can ignore the importance of OERs 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 the integration of OERs in their courses. Suggestions made ranged from building collections or lists of OERs available for 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 OERs through metadata and resource description, information management and resource dissemination, digital or information literacy training (finding and evaluating OERs), development of subject-based guides for finding resources, managing intellectual property rights and promoting appropriate open licensing. Lakshmana (2011) is of the view that educators, librarians and education policy makers should be actively involved in using open technology tools like OERs to build, strengthen, promote and share free educational resources, taking into account the growing illiterate population in developing countries.

In a study by Bueno-de-la-Fuente et al. (2012), it was revealed that the main areas of library's involvement in OERs initiatives are: description and classification, management, preservation, dissemination and promotion. Bueno-de-la-Fuente et al. (2012) further 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 OERs 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, integrating OERs in their collections, selecting and recommending relevant OERs for their institutional curriculum and their users.

OERs promotion strategies employed by librarians include outreach programmes, subject based guides (Smith & Lee, 2017), seminars, and workshops (Muganda et al., 2016; Hess, Nann & Riddle, 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 OERs undertakings. However, in the context of Tanzania much is not known about the strategies libraries and librarians use to facilitate integration and promotion of OERs.

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 supporting its use regardless of format, due to rapid changes brought about by ICT, challenges involving OERs still persist. According to Walji (2014), OERs 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 skills 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 OERs have also been conducted in Tanzania. Mushi and Ruhwanya (2012) analysed the potential of Open Educational Resources (OERs) in higher education curriculum and course materials development and opined that curriculum development is a tedious task which however has been simplified by the availability of open educational resources. Haule (2015) studied Open Educational Resources Utilization in Tanzanian higher

learning institutions and discovered that there is high awareness and utilization of OERs among the scholarly community despite the lack of institutional OERs policies. Mtebe and 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 needed to create and/or use OERs are the main barriers to effective usage of OERs in higher education institutions in Tanzania.

Mtebe and 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 and expectancy had significant positive impact on instructors' intention to adopt and use OERs. They also found factors constraining adoption and use of OERs to include inadequate ICT infrastructure, low level of awareness of copyright issues related to OERs implementation, irrelevance of some OERs to curricula and lack of awareness on existing OERs. Nihuka et al. (2014) examined OERs initiatives at the Open University of Tanzania with special focus on challenges and lessons learned and found that although interesting and useful; the process of designing and developing OERs is a major challenge and requires team work.

Mwamlangala (2015) reported on challenges to effective adaptation and use of OERs at both Open University of Tanzania and the Shanghai Open University that included 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 OERs. A study by Muganda et al. (2016) on analytical insights on the position, challenges, and potential of promoting OERs in open and distance learning institutions in Africa revealed that Open University of Tanzania staff are willing to engage in OERs but have limited awareness, skills, and competencies in the creation, integration and use of OERs. Muganda et al. (2016) further add that knowledge and strategies to promote effective development, use, integration, hosting and dissemination of OERs are important undertakings.

Similarly, Mushi and Muganda (2013) in their study on Open Education Resources (OERs) for national development in Tanzania concluded that OERs have great potential to national development but need proper planning, financial and infrastructural support, and capacity building to overcome incumbent challenges. An investigation by Samzugui and Mwinyimbegu (2013) on the accessibility of open educational resources for distance education learners at the Open University of Tanzania revealed that staff and students at the University are aware of the resources and mainly use them in self-learning. The study also identified limitations faced in relation to OERs as library users' dependence on librarians' assistance in accessing resources, low internet connectivity, unreliable power supply, and inadequacy of computers.

According to Mtebe and Raisamo (2014), there is an increasingly rapid development and use of OERs in higher education institutions (HEIs) in developing countries. However, despite the acceptance and use of the resources in such institutions in Tanzania, the role played by libraries and librarians and its value are not clearly known. In fact, available studies on OERs (see Nihuka et al., 2014; Samzugui and Mwinyimbegu, 2013; Mtebe & Raisamo, 2014; Mwamlangala 2015 and Muganda et al., 2016) focused on various aspects to do with the resources as stipulated earlier. The studies did not address the central roles played by libraries and librarians in OERs in Tanzania. In other words, there is a gap left by these studies. As a result, this study was designed to find out the role played by libraries and librarians in this field.



Research methodology

This study was conducted in Dar es Salaam Region, Tanzania, involving librarians 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). The researcher aspired to choose these university libraries because they have well established ICT infrastructures which are key in offering access to OERs. Besides, the universities were easily accessible to the researcher. Survey research design was used for this study. The use of librarians was based on the fact that they are custodians of information and when comfortable with OERs 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 libraries. Simple random sampling technique was used to select 80 librarians of different ranks.

The study applied both qualitative and quantitative research approaches. Data were collected through a self-administered structured questionnaire containing both open and closed ended questions. The study also adapted some of the questions developed by Roberson (2010). Eighty questionnaires were distributed to respondents out of which 52 (65%) were filled out and returned. Secondary data were obtained through documentary review where both published and unpublished documents such as books, journal articles, annual reports, and research reports were reviewed and major points summarized.

A Statistical Product for Service Solution (SPSS) version 18.0 package was used to generate frequency tables and percentages from quantitative data. The collected data were coded in meaningful logical themes and information and presented in frequency tables, graphs, and charts. Qualitative data were descriptively analysed 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, see Table 1.

Table 1: Name of university

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

Source: Survey Data, 2018

Background information of respondents

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Out of the 52 respondents the results show that 29 (56%) were males and 23 (44%) were females. The data seem to suggest that there are more men in the field of librarianship today than previously thought. The study also involved all librarians, regardless of their levels of academic qualifications. Academic qualifications play an important role in selecting relevant information resources (including OERs) to support teaching, learning and research. Findings show that 20 (38%) of the librarians involved had Masters Degrees, 11 (21%) had Bachelor Degrees, 11 (21%) had Diplomas, 9 (17%) had PhDs and only 1 (2%) was an Associate Library Professor. Rank-wise, the findings show that 12 (23%) respondents were Librarians, 8 (15%) were Assistant Librarians, 19 (37) Library Officers, 2 (4%) ICT personnel and 11 (21%) were Library Assistants, see Figure 1. As seen from these findings, majority of the respondents are either graduates or postgraduates. It is important for librarians to have sufficient education qualifications so as to provide effective library services.

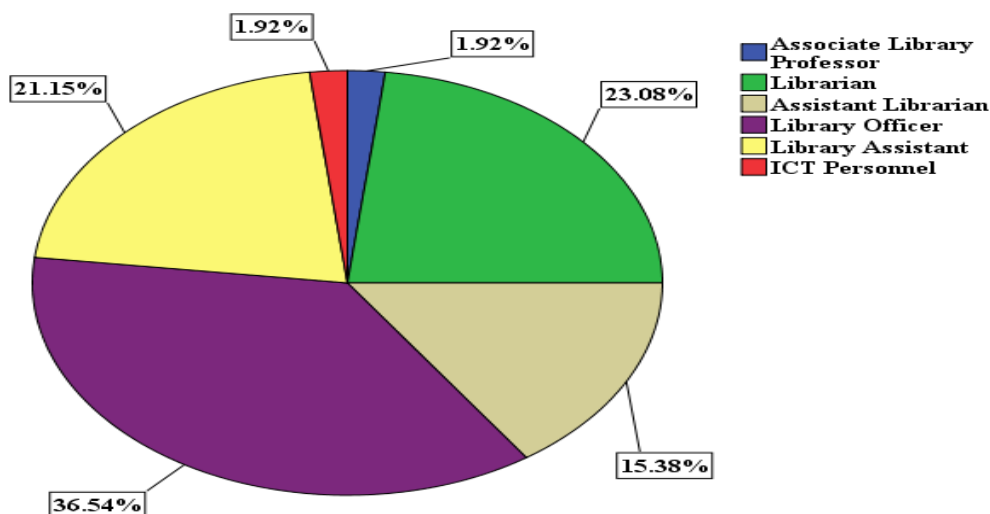


Figure 1: Designation of Respondents
Source: Survey Data, 2018

Librarians' level of awareness on OERs

Open Educational Resources are a relatively new concept in many developing countries. For librarians and users to make effective use of OERs, they need to be familiar with them. In order to establish librarians' level of awareness on the resources, respondents were asked to indicate if they are aware of the term "Open Educational Resources". Findings show that 22 (42%) respondents said they were aware of it, 14 (27%) said they are very aware, 13 (25%) said they were slightly aware, and 3 (6%) said they were not aware; see Figure 2. These findings indicate that a majority of librarians are aware of the term OERs. The findings are in contrast to those reported by INTECH (2012), Kassahun and Nsala (2015), Bueno-de-la-Fuente *et al.* (2012), and Dulle (2010) where it was noted that librarians had limited awareness on Open Access and on



OERs. As, such, these new findings are very encouraging trend because librarians who are custodians of information appear to have become informed about OERs although it is still a new concept in the field of library and information science and, particularly so, in developing countries. By the nature of their duties, librarians have to be vigilant to changes in technology and in the information arena, thus this evidence of their being informed about OERs is encouraging.

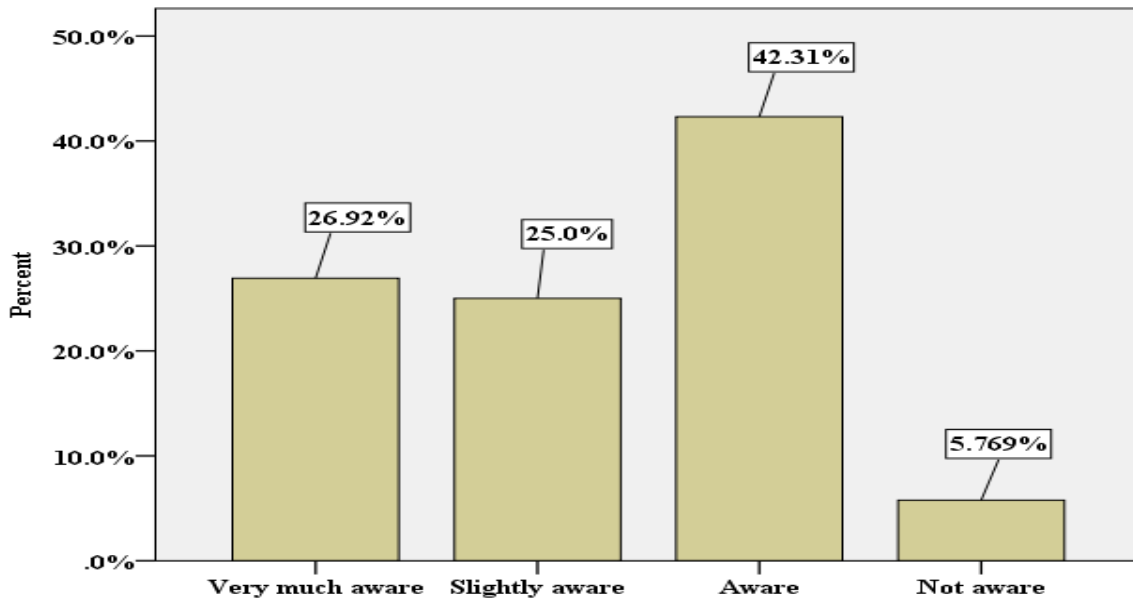


Figure 2: Librarians Awareness on OER
Source: Survey Data, 2018

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 OERs on library websites and institutional repositories which serve as information gateways. To establish if these facilities were being used for this purpose, respondents were asked to mention if they do host OERs. A total of 26 (50%) respondents said they do while the other 26 (50%) said they do not. While this can be seen as an unimpressive statistic, it should be seen as a good step towards making OERs more visible hence promoting their utilization. Respondents were further asked to mention the types of OERs they host; to this, 24 (45%) respondents identified African Virtual University (AVU), 17 (33%) mentioned MIT OCW, 17 (33%) said OERs Africa, 25 (48%) mentioned Open Learn Link, MERLOT while 15 (29%) mentioned TESSA. It is worth noting that among the hosted OERs are those whose preparation involved local experts. These are AVU and TESSA which contain information emanating from Africa and are relevant 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 OERs while ARU website was not accessible at the time of this study because it was undergoing maintenance. These findings imply that there are some efforts by libraries to use OERs as part and parcel of the learning resources for public universities. 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 OERs movement. It is therefore logical for libraries to seize and exploit the OERs opportunity to their advantage.

Reasons for hosting OER

Respondents were also asked to indicate reasons for hosting OERs in their university libraries. Findings reveal that 40 (77%) respondents cited their availability for free, 39 (75%) indicated their ease of access, 35 (67%) cited their presentation of useful up-to-date reference sources and 29 (56%) said because they supplement other learning resources. Based on these responses, it can be concluded that libraries host OERs to ensure the availability and use of learning resources amid dwindling budget allocations for purchasing commercial learning materials. Indeed, hosting OERs has increased their visibility and usability to a wider audience.

Librarians' roles in OER

Respondents were asked what roles they play with regards to OERs. Results in Table 2 show that librarians play multiple roles in relation to the resources. These include promotion 37 (71%), identification 36 (69%), guiding users 35 (67%), dissemination 34 (65%), evaluation 32 (62%), collection 31 (60%), management 30 (58%) and integration 25 (48%). The results imply that academic librarians in Tanzania are more concerned in getting OERs utilized compared to other OERs activities. This signifies the changing roles of librarians in the new information age. The findings are consistent with the position of Robertson (2010) who stresses that it is the librarians' roles to promote openness in open resources; help users describe, discover, manage and use OERs. The findings are also in line with those of Bueno-de-la-Fuente et al. (2012 p. 7.) which state that "the main areas of librarians' involvement are: description and classification, management, preservation, dissemination, and promotion of OERs". 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 OERs), develop subject-based guides for finding resources, managing intellectual property rights, and promoting appropriate open licensing.

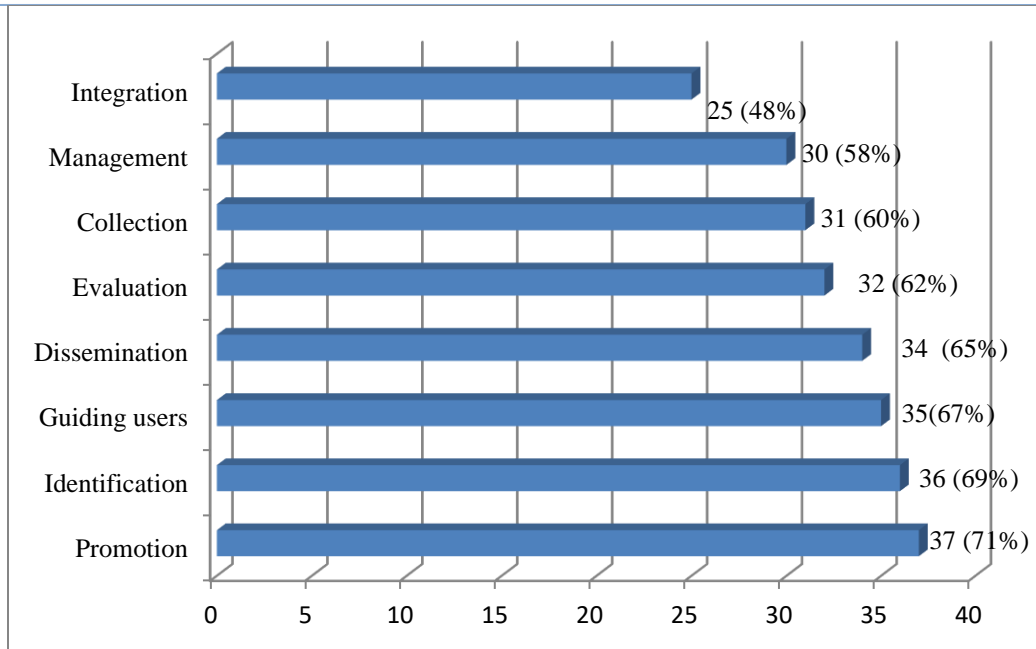


Figure 3: Librarians roles in OER

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 a 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 OERs. The OUT, UDSM and MUHAS have links to OERs on their Websites. In fact, integrating library resources makes the process of searching information easier, thus enhancing access to them. When respondents were asked how they integrate OERs in their collections; 31 (60%) said OERs are integrated on their library websites, 23 (44%) said they are integrated on the university website, 22 (42%) integrated in the library management information system and linked to open access repositories while 16 (31%) said the integration is done through their university repositories as shown in Table 3. These findings imply that to a larger extent libraries integrate OERs 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 (31%) of the respondents integrate OERs in their university institutional repositories. This substantiates Bueno-de-la-Fuente et al. (2012) who assert that the rate of OERs integration in university repositories is still very low. This defeats the whole purpose of institutional repositories which are geared towards improving the visibility and access to information resources, including OERs.

Table 2: Integration of OER in libraries

Items (n = 52)	Frequency	Percentage
Integrated in the Library website	31	60%
Integrated in the university website	23	44%
Integrated in the Library Management Information System	22	42%
Library has a link to the repositories	22	42%
Prepared List of OERs to be integrated in the Reading List	17	33%
Integrated in the university repository	16	31%

Techniques applied by librarians in promoting awareness on OER

Respondents were asked to indicate the techniques they use in promoting awareness of OERs. Findings show that the most prominent tool used to promote awareness on OERs is the library website as confirmed by 42 (81%) respondents while the least used are OERs Portals and ELMS (Moodle) which were both mentioned by 17 (33%) respondents. Other techniques include seminars/ workshops 34 (65%), library training 38 (73%), orientation 36 (69%), social media (face book, twitter, blogs) 26 (50%), institutional repositories 24 (46%), brochures, flyers, posters 29 (56%), and current awareness services 25 (48%). The findings are summarized in 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 OERs. Indeed, the competitiveness of open access sources relies mostly on their ease of access. 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 OERs.

Table 3: OER awareness promotion techniques in libraries

Items (n = 52)	Frequency	Percentage
(a) Library Website	42	81%
(b) Library Training	38	73%
(c) During Orientation	36	69%
(d) Seminars and Workshops	34	65%
(e) Brochures, flyers , posters	29	56%



(f) Social media (Face book, twitter, blogs)	26	50%
(g) Current Awareness Services	25	48%
(h) Institutional Repositories	24	46%
(i) OER Portal	17	33%
(j) ELMS (Moodle)	17	33%

Source: Survey Data, 2018

Techniques for promoting access and usage of OER

There are many ways through which academic libraries promote access and usage of OERs. Respondents were asked to indicate techniques they use to do so and 43 (83%) mentioned information literacy training, 42 (81%) university website, 34 (65%) face to face sessions, 26 (50%) Institutional Repository, 27 (52%) OERs Portal and 16 (31%) mentioned ELMS Moodle. The findings are displayed in Table 5. Based on these findings, it can be deduced that information literacy training is the most preferred method for enhancing access and use of OERs 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 where it is offered in form of library orientation, library instructional courses, and library manuals and guides. The findings portray a positive role played by libraries and librarians in promoting access and use of OERs. The findings coincide with those of Robertson (2010) who asserts that “One way through which libraries might be involved in OERs (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 OERs” p. 5.

Table 4: Access and use promotion techniques

Items	(n = 52)	Frequency	Percentage
Through information literacy training		43	83%
Through website		42	81%
Through face to face sessions		34	65%
Institutional repositories		26	50%
OER portal		27	52%
ELMS (Moodle)		16	31%

Source: Survey Data, 2018

Library involvement in OER

Respondents were asked to indicate areas where the library as an institution is involved in OERs. Findings, as presented in Table 6, show that 38 (73%) indicated that the library conducts training on OERs, 31 (60%) said their libraries support university OER initiatives, 26 (50%) said they host OERs, and 21 (40%) said they create OERs. The findings indicate that majority of respondents said that libraries are involved in conducting training to help users access OERs. Training is very important when it comes to accessing information such as OERs because it equips library users with effective lifelong skills in information searching, evaluation and use. It goes without saying that, maximum utilization of OERs depends very much on information literacy skills of which libraries offer to their users.

Table 5: Library involvement in OER

Item (n = 52)	Frequency	Percentage
Conducts training on OER	38	73%
Supports university OER initiatives	31	60%
Hosts OER	26	50%
Creates OER	21	40%

Source: Survey Data, 2018

Challenges encountered by librarians in OER

In response to a question on challenges faced when dealing with OERs, 46 (89%) of the respondents said it was low level of awareness on existing OERs despite their availability on websites and institutional repositories. This could be due to lack of techno-know-how on how to locate OERs and inability to choose from the vast information resources. This consequently deters effective utilization of OERs by staff, teachers and students in supporting teaching and learning. Usage of OERs 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 OERs 36 (69%), inadequate bandwidth 35 (67%), and OERs not being recommended by lecturers 24 (46%).

Nonetheless, the fact that 69% of the respondents said lack of policies and guidelines is a major challenge to full utilization of OERs should be taken into consideration. Users usually feel more confident to use the resource which they know the boundaries of so as to avoid litigation. According to Samzug (2017), such a policy is the one that theoretically guides best practices. As a way forward, there is a need for universities in Tanzania without OERs policies to put one in place. In fact, challenges such as lack of awareness on OERs' existence, lack of guidelines and policies on the use of OERs, inadequate bandwidth, and lecturers' failure to recommend these resources are not unique to Tanzania alone but also common in other learning institutions in other parts of the world (Lakshmana 2011; Walji 2014).



Table 6: Challenges in OER promotion and use

Items	n = 52	Frequency	Percentage
Lack of awareness on their existence		46	89%
Lack of policy guiding the use of OER		36	69%
Inadequate bandwidth		35	67%
Not recommended by lecturers		24	46%

Source: Survey Data, 2018

Conclusion and recommendations

The study findings reveal that a majority of librarians are aware of OERs and are involved in a number of activities in promoting their access and use. In the efforts to ensure proper use of OERs librarians do face some challenges including lack of awareness on existing OERs and lack of institutional policies to guide ethical use of OERs. Based on these findings, the study recommends formulation of institutional policies on OERs and more awareness campaigns on the resources. In addition, the Consortium for Tanzania Research and University Libraries should include OERs in their agenda as a regular item for discussion during their annual and general meetings which bring together librarians. As a way forward, librarians should consider several courses of action based on the findings of the study.

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