

East African Journal of Information Science

An Exploration of Academic Library Involvement in the Adaption of Open Educational Resources

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Published on: Feb 09, 2018

Updated on: Jul 31, 2018

DOI: [10.21428/851f7e9a](https://doi.org/10.21428/851f7e9a)

Abstract

Library involvement in the adoption of Open Educational Resources (OERs) is critical to their development, use and sustainability in higher education. Academic librarians' position at the core of higher learning in educational institutions makes the right go between for effective OERs adoption. OER users need to be equipped with information literacy skills such as assessing the quality of the material, its origin, currency, and fit with the students' current learning patterns. Libraries can offer advice to institutions, academic staff, and students as they engage with OERs. This paper presents an exploration of academic libraries' involvement in OERs adoption.

<https://doi.org/10.21428/851f7e9a>

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Keywords: Open Educational Resources, Library involvement

Introduction

There has been an increasingly rapid development of open educational resources (OERs) especially in institutions of higher learning. SPARC (2014) defines OERs as teaching, learning, and research resources that either reside in the public domain or carry a license that permits their free use, sharing and adaptation by all users. OERs importance in higher education cannot be over-emphasized. Mtebe & Raisamo (2014) acknowledge that the availability of OER in the public domain can offer several benefits to higher education. These include helping instructors to improve the quality of existing courses or develop new courses through adapting, modifying, and reusing thousands of freely available courses in the public domain. OERs can also improve the quality of locally developed content by sharing course content under open licenses through receiving plenty of peer reviews from other academics in OER communities. Additionally, through participating in OER communities, staff can acquire skills and competences to develop quality course content. These skills include content/subject matter, instructional techniques, online approaches, review processes, production, presentation, and publishing of educational materials. SPARC (2014) agrees that OERs can reduce the cost of textbooks, expand access to knowledge, and support students' success. Mtebe & Raisamo (2014) further observe that OERs can reduce social inequalities by complementing existing blended learning courses offered by several institutions in Tanzania. Cakmak, Ozel & Yilmaz (2012) additionally acknowledge that OERs provide great opportunities for an increase in knowledge dissemination in accordance with the educational purpose of universities.

Ngugi (2013) acknowledges that African universities are dealing with significant pressure to increase access to Higher Education programmes. Furthermore most institutions are increasing enrolments

despite structural under-funding. Most programmes (including many at postgraduate level) rely heavily on lecturing as a primary mode of transmission of content. Turmaine (2013) expresses that OER might be a solution to reach a larger number of students regardless of location, available space, lack of teachers, disability, age, professional activity, time; develop lifelong learning as well as advance knowledge. Additionally, Thoms & Thoms(2014) observe that open educational resources can add authenticity and vitality to the foreign language classroom and create an environment where both students and faculty are more engaged participants. Indeed Walz (2015) confirms that Open Educational Resources (OER) have saved students millions of dollars in textbook costs and greatly expanded access to a wide variety of educational materials for countless numbers of students and life-long learners. OER have also saved teachers time and effort by allowing them to reuse, modify, and build on materials developed by other teachers.

Despite their advantages, OERs are not as widespread as expected. Mtebe & Raisamo (2014b) express that despite the potential benefits offered by OER, the use of these resources in many institutions of Higher Education in Sub-Saharan countries is very low. Jensen & West (2015) observe that despite an abundance of resources on a wide range of topics, their usage has not risen to an extensive level. Because of their position at the core of higher learning in educational institutions academic librarians could be the rights go between for their development (Turmaine2013). This paper presents an exploration of academic libraries' involvement in OERs.

The main objective was to explore the role of librarians in the adoption of open educational resources.

1. Opportunities available for library involvement in OER initiatives
2. Involvement of libraries in OER initiatives
3. Academic library readiness to OER adoption

The study was designed to explore different and dissenting voices and perspectives on the role of librarians in adoption of OERs. It involved collecting and interrogating data from current secondary sources on OERs and libraries. Documentary review was used as a data collection method. Data were gathered from a total of sixteen peer reviewed journal articles published between 201-2015.

Open Educational Resources and Libraries

Library involvement in the adoption of OERs is critical to their development, use and sustainability in higher education. Many studies have been carried out exploring the role of librarians in the Open Access movement as well as in the area of open educational resources. Appreciating the fact that there is a clear need for institutional-level leadership in the adoption of OER as a strategy for improving access and student achievement at our institutions Jensen & West (2015) agree that librarians can play

that role. They then argue that the main question for most libraries is how to get started as OER leaders, need for supporters in policy, help in finding quality materials, and professional development around copyright, open licensing, and integrated course design. On the other hand Robertson (2010) is of the opinion that libraries have an opportunity to capitalize on their already important role in the students' studies, the academic's professional development, and institution's public portfolio, as the range and number of OERs increases.

Robertson (2010) investigated library involvement in OERs and concluded that in the release of OERs there is a broad distribution of involvement from leading initiatives to probably not being aware of them. He further noted that there are signs that librarians are beginning to engage with the Open Educational movement. Belliston (2009) highlights librarians' contribution and states:

“Librarians can help by contributing their own OERs to the commons; screening for,

Indexing, and archiving quality OERs; using OERs in their own teaching; and participating in discussions leading toward responsible intellectual property policies and useful standards.”

According to Robertson (2010) many are engaging with their university libraries, not only to seek advice about resource description and the application of metadata standards but also to consider the long term role institutional repositories might play in managing these assets and the possible role of the library in the OER production workflow.

Actually, Turmaine (2013) notes that librarians have supported the open access movement worldwide from its inception. She views OERs as a link to this movement. She further sees OERs as important resources in university libraries because they are at the moment mostly developed at university level.

Furthermore, Robertson (2010) expresses that OERs become additional resources that subject librarians can use in supporting students. Indeed, OER-users need to be equipped with information literacy skills such as assessing the quality of the material, its origin, currency, and fit with the student's current learning patterns. Libraries can offer advice to institutions, academic staff, and students as they engage with OERs in the following areas:

- Metadata and resource description
- Information management and resource dissemination
- Digital or Information literacy (finding and evaluating OERs)
- Subject-based guides to finding resources
- Managing intellectual property rights and promoting appropriate open licensing

Librarians undoubtedly have a major role to play in empowering instructors with the needed information literacy skills. Mtebe & Raisamo (2014) revealed that a majority of instructors could not

find open educational resources which are relevant to their contexts. The study revealed that some instructors are suspicious about the quality of OER and other resources from the internet. Indeed, Robertson (2010) further acknowledges that academic libraries play a vital role in the Open Access movement and often provide skills, training, advocacy and may manage the required infrastructure. They are playing a role in challenging pricing models for electronic resources and helping to explore alternative models of publication through Open Access journals. This is not to say that Open Access is fully mature, nor to say that libraries have wholeheartedly embraced it, but rather to make the point that libraries have played a significant role in helping Open Access move from a niche activity carried out by sections of the physics community to a more mainstream and institutionally embedded approach to scholarly publication. Libraries are also beginning to play a role in the emerging world of Open Data and Open Science, but their involvement in the OER movement has thus far been limited, as has their involvement more generally in the management of learning materials Robertson (2010).

Robertson (2010) opines that the fact that there is support for OERs as there is for other digital resources raises an interesting question – is it enough to support the use of OERs in the same way as other resources or do users need OER-specific support. He acknowledges additional support for OERs is needed but laments that it is not happening in practice. Robertson (2010) further stated that there is a lack of engagement with OERs recorded in the library results but more engagement recorded for individual librarians. He further suggests that there is indication that libraries don't have much to do with the management of teaching materials.

Robertson's (2010) study revealed that there is expectation that libraries could support tagging and metadata, identify and index quality OERs, and more generally support discovery and use of OERs by academic staff and students. Robertson (2010) observes that there was most library involvement in the provision of IPR guidance, and least involvement in identifying and indexing quality OERs and in providing guidance about metadata.

Robertson (2010) concluded that there are identified points of contact between libraries and OER initiatives and ways in which they could collaborate to better support academic staff and students. The survey results demonstrate that there is some library involvement in OER initiatives and common areas of interest that a greater role for libraries is one route that could be explored in making OER initiatives more sustainable.

Turmaine (2013) sees librarians as better placed for effective adoption of OERs as their training is OER related: they are taught how to search for the right information on a variety of support; train people to find appropriate information; deal with copyright issues; manage repositories and index documents for dissemination and easy retrieval. In support of this De Rosa (2015) opines that librarians have wonderful lessons to teach us about building structures that are responsive to the needs of the people they serve, and they are trained to understand the complex ways in which information is changing in

the knowledge economy. De Rosa further asserts that it is important for OER initiatives to provide a space where librarians can work in an integrated way with faculty and instructional designers.

Walz (2015) acknowledges that there are many opportunities for libraries to lead OER use and production initiatives. Walz (2015) opines that since anyone can access and use openly licensed materials, unique opportunities exist especially for publicly funded institutions, including public libraries and state funded public educational institutions which seem to be asked to do more with less. Furthermore, teachers, students, and library patrons of these institutions are perhaps the most obvious initial beneficiaries and end-users of open educational resources.

Walz (2015) cited groups and associations which are exploring OER and other publishing initiatives through libraries such as the Library Publishing Coalition (LPC) which began in 2012 and is now a collaboration of over 50 libraries. The second is the SPARC Libraries & OER Forum, an email discussion list with occasional teleconferences that was started in March [2014](#). It is a forum for librarians to share ideas, resources, and best practices pertaining to OER; a channel of communication; and a source of important updates about policy, research, projects and other news from the broader OER movement.

Walz (2015) expresses that library initiatives include assisting faculty in developing and adopting alternatives to textbooks for example through the Temple University Library's Alternative Textbook Project; allocating funds from the Kansas State Student Governing Association for development of Open/Alternative Textbooks as done by Kansas State Libraries; training faculty to create and use OER and library materials in lieu textbooks in support of student learning by Emory University's Emory Open Education Initiative and incentivizing "instructors to use low-cost or free alternatives to expensive course materials by the UCLA Library Affordable Course Materials Initiative. Other library-oriented OER initiatives include a Jose State University's Affordable Learning Solutions guide by college; University of Minnesota's Open Textbook Library creates infrastructure to more easily find peer reviews and open textbooks. Many libraries wishing to reduce barriers and student costs have implemented textbooks-on-reserve programs or programs purchasing multi-user licenses for e-textbooks as a way to increase student access to textbooks.

Noting that faculties from various disciplines report a deficiency of high quality, commercially available materials, Walz (2015) suggests that libraries may wish to survey faculty regarding gaps in content for their courses. She further noted that as existing OER are available only in subject areas where authors have chosen to apply open licenses, perhaps these areas are potential places for authoring of new open educational resources, including resources that go beyond flat PDF textbooks and incorporate interactive and multimedia elements. She opines that libraries may want to also assist faculty who are creating materials in understanding their options as copyright holders. For faculties who wish to share their resources, understanding the intent of the various creative commons licenses

is important, as is applying them, and sharing materials in the most appropriate local, national, international, or subject-specific repository.

Walz (2015) expresses that finding high quality, current, and relevant resources, ensuring their stability, and educating for copyright compliance are difficult tasks. Each of these areas is a potential teaching and service opportunity for academic libraries. Walz (2015) also acknowledges that a number of libraries are involved in identifying OER or subscribed library materials, consulting regarding application of instructional design principles, pedagogies, and providing stipends or incentives for faculty to redesign course programs.

Kleymeer, Kleinma & Hans(2010)on the other hand attribute the implication of library involvement in OER initiatives to the philosophical convergence and library infrastructure. Libraries and OER academics, they state,are determined to improve access to all kinds of scholarly and educational materials, both on their campuses and throughout the world. With regard to infrastructurethey express that libraries already have search and discovery systems, copyright expertise, data storage, metadata and indexing, institutional repositories and preservation expertise; and relationships: libraries have trusted relationships enabling outreach and education, curriculum development expertise, instructional support. In support of this view Cakmak, Ozel&Yilmaz (2012) see libraries as the main supporter of educational activities at universities with their informational resources and express that it is vitally significant and essential for them to participate directly in OERs initiatives and revise their services and collections in the scope of OERs.

Successful adoption of OERs is hindered by many barriers. SPARC(2014) established such barriers as finding quality and creating OERs as being time consuming; OERs may lack prepared tests/quizzes that commercial text books offer;students' preference to read offline; Longivity of file formats and lack of knowledge by faculty with regard to resources, licenses,copyright and support. In this regard Carmen (2014) put that librarians can play a central role in eliminating these barriers by fostering awareness and use of OERs; encouraging educators and learners to participate in the open education movement; creating, adapting, and remixing content;calling on educators, authors, publishers, and institutions to release resources openly, using open licensing and open technologies, and encouraging governments, school boards, colleges, and universities to make open education a high priority via support for capacity building and policies (e.g. relating to copyright, tenure, and promotions) that facilitate creation and sharing of OERs. Carmen (2014)further calls upon librarians to engage in OER advocacy work through engagement in activities that garner support for OERs and remove any impediments to their development.Indeed, Mtebe & Raisamo (2014) confirms that some instructors are still unaware of the existence of OER.

Additionally, Bueno-de-la-Fuente *et al.* (2012) confirm that the library played a leading role in many OER initiatives. Most respondents (61%) considered the library's contributions to be indispensable or

very valuable, with an additional 23% viewing library involvement as valuable. Bueno-de-la-Fuente *et al.*'s (2012) survey showed that the main areas of library involvement were description, classification, management, preservation, dissemination, and promotion, with some involvement in intellectual property and licensing rights, discovery of OERs, evaluation of OERs, use of OERs in teaching, and the creation or repurposing of OERs, but that in many instances, librarians needed to develop. Although there is need for additional skills the study confirmed that the expertise of librarians in most of the general LIS technologies and skills is needed at OER initiatives. Furthermore, OER project librarians also offer expertise in some specific e-learning technologies, as learning content management tools or learning metadata.

Consequently Bueno-de-la-Fuente *et al.* (2012) portrayed that library involvement in OER initiatives would be of "great benefit to those [OER] projects not yet engaged with them" Carmen (2014) noted that despite this, the importance of library involvement was not widely understood as Bueno-de-la-Fuente *et al.* (2012) study further revealed that even if the library and/or librarians are well valued by the projects they are already engaged with, the participation of the library is still not widespread, and a significant lack of awareness exists both from OER initiatives with regards to library activities and from libraries about the resources released by OER initiatives. Walz (2015) confirms this argument and expresses that in the development of the Z Degree project, a Tidewater Community College's project which replaced textbooks with OER resulting in a zero textbook cost, organizers did not initially partner with the library. Thoms & Thoms (2014) highlighted several findings from a survey distributed to 155 university-level language program directors (LPDs). 73% of respondents indicated that they had not considered the university library as a resource.

Carmen (2014) is in agreement with Bueno-de-la-Fuente *et al.* (2012) that there is a need for libraries, library associations, and LIS education programs to engage with the OER movement and that facilitating increased participation by libraries could be an important contribution towards making OER initiatives more sustainable. Carmen (2014) asserts that librarians have a host of skills and technologies needed by OER projects, which, if further developed and expanded upon, would enable the OER community to address some of its most pressing problems: awareness and promotion of OERs, capacity building, communities and networking, sustainability, quality, copyright, learning support services, accessibility, facilitation of finding and use of OERs, and the embedding of OERs into institutional policies, structures, and programs. Mtebe & Raisamo (2014) revealed that some instructors do not have knowledge about copyright and intellectual property issues. In this regard, instructors do not know which resources should be shared in the public domain, and which rights should be reserved to the institution or to the authors. For example, in Mtebe & Raisamo (2014) study one instructor said:

"...I don't have knowledge on the existence of OER and how to use OER but also fear to share my materials with fear of copyright issues..."

Librarians' skills therefore come in handy in assisting instructors' engagements with OERs.

Nikoi (2010) carried out research on stakeholder views on open educational resources. The study revealed that librarians see OERs benefitting UK Higher Education in terms of institutional prestige, shared good practice, cost reduction and showcasing teaching materials. According to Nikoi(2010)the main issues of concern to librarians are third party copyright; currency and quality of materials and funding of OERs. Librarians would like to see policies that reflect management support; take up and put down of OERs and metadata requirements. Librarians see themselves playing the roles of managers of OER repositories; developers of generic OERs e.g. study skill materials; indexers and cataloguers of OERs and liaison and promotion of OERs.

Conclusion

Facilitation of equitable access to educational resources is key in ensuring success in teaching, learning and research. The increasingly rapid development and use of open educational resources in higher education institutions come in handy as they widen access, reduce the costs, and improve the quality of education. Libraries undoubtedly have a major role to play in facilitating adoption of OERs in institutions of higher learning since they act as key players supporting the adoption of OER within higher education.

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