Current Landscape of Open Educational Resources (OER) in Malaysian Academic Libraries

Nurul Diana Jasni, Noorhidawati Abdullah and **Yanti Idaya Aspura Mohd Khalid**
Department of Library & Information Science,
Faculty of Arts & Social Sciences, Universiti Malaya
Kuala Lumpur, MALAYSIA
e-mail: s2118967@siswa.um.edu.my ; noorhidawati@um.edu.my ; yanti@um.edu.my

ABSTRACT

Open Educational Resources (OER) are intrinsically related to developments in Open Science due to the broader implications of access to knowledge in education in global societies. Librarians' contribution to the OER movement begins with the emerging world of Open Data and Open Science. Still, their involvement in the OER projects has thus far been limited, as their involvement is more generally in managing learning materials. Therefore, this study was conducted to investigate the current landscape of OER initiated by Malaysian academic libraries. This study used a qualitative research design. A total of 16 e-mails were sent out to each higher institution under Malaysia iOER National Policy to participate in the semi-structured, recorded, and transcribed interviews to allow new viewpoints to emerge freely. The findings revealed that current involvement in supporting OER initiatives at Malaysian higher education institutions was demonstrated in creating OER Library Guides. The focus of OER library guide on their library websites was to advocate awareness for their library users in using, searching, and finding OER resources. Although academic librarians at higher education institutions are aware and interested in OER and open educational practices, there are several challenges that need to be overcome to achieve their potential roles. Three main challenges encountered by academic librarians in supporting OER at their institutions; Lack of training and capacity building focusing on OER; Librarian's advocacy in promoting OER; Low involvement and engagement between libraries and faculty members. The study's outcome will particularly propose a better opportunity for more fostered collaboration where libraries and information professionals have an essential role in expanding the range of OER movement in fostering open education. The implications would also be helpful to redesign LIS curriculum in making future continuing professional development (CPD) that will contribute to the success of OER adoption.

Keywords: Open Educational Resources, OER, Open Education, Distance Education, Digital Library

INTRODUCTION

Open Educational Resources (OER) are intrinsically related to developments in Open Science due to the wider implications of access to knowledge in education in global societies (Ramirez-Montoya 2020). The term Open Educational Resources (OER) encompasses learning, teaching and research materials in any format and medium that reside in the public

domain or are under the copyright that has been released under an open license that permits no-cost access, re-use, re-purpose, adaptation and redistribution by others (Wiley, Bliss, and McEwen 2014). A healthy volume of OER is increasingly made available and can be accessible by many students. However, disabled students who typically depend on particular applications or devices with accessibility features require the OER to have an inclusivity design to gain the same benefits. Unfortunately, educational content that is free to access is still limited in many disciplines, and many need to be designed for inclusivity.

Librarian's potential contribution to the OER movement also began with the emerging world of Open Data and Open Science. Still, their involvement in the OER projects has thus far been limited, as their involvement more generally in managing learning materials (Darling-Hammond et al. 2020). On the other hand, academic libraries emerged much stronger from the COVID-19 crisis, and they were able to provide value and demonstrate their worth to support OER initiatives for higher institutions who want to adopt and adapt. According to (Bond, Huddleston, and Sapp 2021), libraries and other change agents should maximize this opportunity to promote OER as a possible alternative learning material compared to traditional textbooks.

Academic libraries are committed to improving the dissemination of scholarly and educational content for their users, and with that aim in mind, they regularly create and organize collections of learning and quality teaching materials (Kimball et al. 2022; Baas et al. 2022; Pontika 2019). The widespread use of OER makes a significant difference in democratizing access to more high-quality open education. The adoption, expansion, and enculturation of OER with the aid of information and communication technology in higher education will transform educational practices through the effective use of educational resources available with open licenses (Todorinova and Wilkinson 2020).

Purpose/Aim

The study aimed to investigate the current landscape of OER in selected initiatives by Malaysian academic libraries. This paper will examine the following research questions:

RQ1: What is the library's involvement in the delivery of OER services at Malaysian higher education institutions?

RQ2: What challenges are encountered by academic librarians in supporting OER initiatives?

LITERATURE REVIEW

OER Initiatives from Malaysian Higher Institutions

The National Inclusive Open Educational Resources (iOER) Policy, established by the Ministry of Higher Education (MoHE) in 2021, responded to the need to ensure inclusive learning

opportunities that benefit all learners in Malaysia. This innovative policy is aligned with implementing the 2019 UNESCO Recommendation on OER adopted by UNESCO's General Conference at its 40th session. The Inclusive Open Educational Resources (iOER) has been produced as a national policy statement to provide direction in the design, development, and use of iOER. It drives to increase access and support quality teaching and learning in Malaysia's higher education under a creative commons license which involves content, activities and resources that fit and can be adapted to everyone's unique needs with no or minimal barriers (Soon Fook 2019). Since 2019, UNESCO has been proud to have worked closely in Malaysia with the Ministry of Higher Education, core experts and key stakeholders to develop policy guidelines and build capacity for more inclusive OER s development based on Universal Design for Learning (UDL) principles (Huang et al. 2020).

To achieve this, higher education institutions in Malaysia have embarked on the OER movement to harness the full potential of open access to educational content in supporting online and distance learning, especially essential during the current pandemic Covid19 outbreak (Ossiannilsson 2021). In presence, to leverage OER for enriching learning experiences, Malaysian Higher Institutions had initiated the OER platform through OER dedicated web presence, MOOC@institutions, MOOC@Open Learning, Micro-Credential Courses and Open Courseware (OCW) Platform (Nurul Diana Jasni , Noorhidawati Abdullah, and Yanti Idaya Aspura Mohd Khalid 2022).

Bhandigadi (2020) holds the view that the adoption, expansion, and enculturation of OER with the aid of information and communication technology in Malaysian education will transform educational practices through the effective use of educational resources available with open licenses. The establishment of the OER in Malaysia is still in its infancy, which leads to issues of discoverability, accessibility, and retrieval. Several higher education institutions in Malaysia have reported embarking on the OER movement. However, there is no common understanding of how OER should be developed through open licenses due to the lack of specific guidelines especially for the educators (Zainuddin et al. 2017). The situation indicates low involvement and engagement between libraries and faculty members, which stipulate a crucial need for libraries to be more engaged with educators in supporting OER development.

Embracing the Role of Academic Libraries in OER
Academic libraries and information professionals have experimented with a variety of approaches in providing information resources and research assistance to their users because the recent shift in technology has brought changes in the way students use academic libraries and library resources (Clemons and Schonfeld 2016; Carlson and Johnston 2015; Soehner, Steeves, and Ward 2010; Hussain, Mahmood, and Shafique 2008). As such, university libraries utilize the new digital technologies and emerging pedagogical practice blend and can deliver their services at different levels in different environmental settings.

Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and other tools, materials or techniques used to support access to knowledge (William and Foundation 2008). The open provision of educational resources, enabled by information and communication technologies, for consultation, use

and adaptation by a community of users for non-commercial purposes is seen as an excellent platform to ensure the effectiveness of teaching and learning processes (UNESCO 2007). However, as much as OER initiatives come with positive opportunities, there are also challenges encountered over the same. In discussing the matters of OER and academic libraries, educators indicate that more libraries involvement, advocacy, and capacity-building need to occur in higher institutions due to the lack of understanding of librarians in promoting OER in higher education was seen as the largest perceived barrier to OER adoption.

Libraries' involvement can support OER initiatives within access services, technical services, collections development, digital initiatives, or departmental liaisons — all of which intersect with OER in one way or another. However, most academic libraries generally do not link OER with their library resources or initiate digital educational resources due to a lack of understanding about their roles and their advocacy about OER in higher education. There has been little research on the role of academic libraries in supporting OER, and previous research found there is a lack of OER awareness involving libraries, and few have involved libraries in developing OER policies in higher education institutions. Collaborations between OER initiatives and libraries about the storage of OER and improving their discoverability are not yet widespread due to lack of access, engagement to OER Policy, OER project initiatives programs and practices for instruction.

Academic librarians have an important role and a professional responsibility to take the lead in supporting faculty and students in expanding the range of OER movement in higher education (Ahmed and Othman 2021; Thompson and Muir 2020). Librarians can serve as information specialists and other roles on OER development teams alongside faculty subject-matter experts, instructional designers/ technologists, and media developers. With these skills, academic libraries and librarians can serve as leaders and providers of critical components for implementing OER. The study's outcome will remarkably propose a better opportunity for more fostered collaboration where libraries and information professionals have an essential role in expanding the range of the OER movement in fostering open education. The implications would also be helpful for LIS schools to redesign their curriculum in making future continuing professional development (CPD) or capacity building on libraries roles towards OER adoption. As the new partnership emerges, the outcome will foster collaboration among libraries and various departments, producing best practices in fostering open education.

RESEARCH DESIGN

This study used a qualitative research design. Sixteen (16) invitation emails were sent to each higher institution under Malaysia iOER National Policy. They were invited to participate in the semi-structured, recorded, and transcribed interviews. Only (n=4) respondents from four different academic libraries agreed to participate in the interview sessions to gather data about their current involvement and services in supporting OER initiatives. The selected academic libraries include a wide range of dissemination and promotion of OER, such as OER library guide, OER library portal, infrastructure support for OER projects and the aggregation of OER repositories. The interview session was held from January 2023 until April 2023 using

Online Meeting Microsoft Teams and face to face. Data analysis is still ongoing. This study has sought to sketch out some ideas and report on a preliminary survey exploring the current practice of Malaysian academic libraries in supporting OER initiatives in this area. The findings presented here are preliminary and may be subject to minor revisions.

RESULTS

When conducting an interview study, gathering demographic information from participants is essential to provide context and analyze data effectively. Throughout the study, to maintain participant anonymity, all demographic information provided by participants was kept strictly confidential and only used for research purposes. This section includes the demographic data of the respondents. Most of the respondents had working experience of more than 10 years in academic libraries. The findings are significant in embracing the role of academic libraries in OER, especially in providing OER services at their higher institutions.

Table 1: Demographic Information

Informant Code	Institutions Code	Age / Length of Service	Gender	Category
AL01	U1	47 years / 19 years	Female	Librarian
AL02	U2	38 years / 12 years	Female	Librarian
AL03	U3	40 years / 14 years	Male	Head of Library Department
AL04	U4	53 years / 27 years	Female	Head of Library Department

RQ1: Library's involvement in the delivery of OER services at Malaysian higher education institutions

Academic libraries are also involved, especially in supporting OER at their respective higher institutions. Findings revealed that current involvement in supporting OER initiatives at Malaysian higher education institutions was elaborate in two criteria as in Table 1. Respondents share their current involvement and support and what their OER services are.

Table 2: Library Involvement & OER Services

Respondent	Current Involvement & Support	OER Services
AL01	OER Library Guide provides and assists their user where they can search for a particular type of OER collections: OER Repositories; Open textbook collections; Open journal collections; e-newspaper; Photo images; Video and film; Malaysian collections; Open learning courses; Presentation templates	Advocates and promotes OER during library briefings for new students and during information literacy skills classes.
AL02	OER Library Guide provides a general introduction to OER, Creative Commons Licensing, where to find OER and Evaluating OER	-Introduction to OER, definition of OER, -The 5Rs of OER, why use OER, video on OER
AL03	An online OER platform built by Library (that collects, stores, and disseminates all OER materials published by faculty/academicians. The platform allows OER upload, endorsement, and impact analytics as well. This initiative was a collaboration project with the academic center as libraries had been appointed as the administration team	- Develop, test, and maintain OER platform -Facilitate OER training modules preparation and web usage -Administrator and help desk for OER Portal
AL04	OER Index Page contains information about what are OER, OER useful links, OER Commons, Open Textbook Library, videos, and promoting educational resources on sustainable development)	Promoting SDG Academy (free MOOCs educational courses and videos) during library briefings for new students and Academic Language Learning Service (ALLS) sessions.

Findings revealed that current involvement in supporting OER initiatives at Malaysian higher education institutions was demonstrated in creating OER Library Guides. The focus of OER library guide on their library websites was to advocate awareness for their library users in using, searching, and finding OER resources. In addition, libraries provide access to the OER resources via Library portal to facilitate access. To encourage the use of OER, librarians promote and advocate the use of OER in information literacy classes, social media and via their research support services. However, the library's involvement can support more OER initiatives such as assistance finding high-quality OER, OER consultation, copyrighted learning resources, expertise in publishing, and existing relationships with campus departments (Katz 2020, 2019).

RQ2: Challenges encountered by academic librarians in supporting OER initiatives?

The findings of this study indicate that although academic librarians at higher education institutions are aware of and interested in OER and open educational practices, several challenges need to be overcome to achieve their potential roles.

Three main challenges emerged from the research was:
- • Lack of training and capacity building focusing on OER
- • Librarians' advocacy in promoting OER
- • Low involvement and engagement between libraries and faculty members

• Lack of training and capacity building focusing on *OER* and librarians

> *"… since my library started OER guides, for this time being didn't experience or get any proper formal trainings about OER yet…all was by our self-learning through various OER platforms."* *(L01, April 5, 2023, line22)*

> *"…can't find any trainings organized dedicatedly for librarians. But I had experience attend many workshops talking about Open Science…"(L04, April 5, 2023, line35)*

> *"…not only academic librarian, but LIS professionals from any organizations should also be aware about OER. Get involved and enhance collaboration with OER projects…" (L03, February 3, 2023, line20)*

An effective training program is essential to improve librarian skills in (OER) to enhance librarians' knowledge and engagement in this area, which will lead and motivate librarians to collaborate on more ideas, tools, and strategies for OER initiatives. In addition, when professionals engage in training programs, they can realize positive professional outcomes and attain a personal sense of accomplishment (Thornton 2021) that would create a positive and encouraging synergy within departments and help establish clear policies.

• Librarian's advocacy in promoting OER

"…during library briefing especially for new students or during library skills sessions librarians can spread the word about the existence of OER in the first place.." (L01, February 3, 2023, line28)

"…librarians can help to increase the awareness of OER with faculty liaisons so that they can be infused along in the faculty outreach program." (L03, February 3, 2023, line50)

"…In the future, we hope we can help them with our expertise such as copyright advisor, OER subject metadata or helping them in promoting OER contents…"(L02, February 3, 2023, line79)

From the above findings, librarians are already making efforts and are one step closer to encouraging the adoption and creation of open educational resources (OER) at their higher institutions. For example, academic libraries in Malaysia have initiated OER library guides and advocates about OER for their students during library skills and library briefing programs.

> *" … as an academic librarian I am aware of OER but yes.. until today at my institutions, there is still no library involvement between the faculty or lecturers on any OER initiatives.." (L03, February 3, 2023, line68)*

> *"…why not faculties or lecturers approach us or contact us? I'm willing to get involved.." (L04, March 5, line56)*

> *"… I don't get any info. No librarian in my organization has been involved or experienced so far with any OER projects. Librarian also need to have skill and knowledge to support OER…"(L01, February 3, 2023, line42)*

> *"…showing OER support is no an easy task. But still, I'm ready to offer my support in helping faculty to find and locate quality OER materials …"(L02, February 3, 2023, line 50)*

● **Low involvement and engagement between libraries and faculty members**

The situation indicates low involvement and engagement between libraries and faculty members, which stipulate a crucial need for libraries to be more engaged with educators in supporting OER development. The findings indicated that academic libraries must promote their librarian's expertise and competencies among faculty members and stakeholders, which led to librarians' contribution to the OER initiatives. From the above findings, librarians are already making efforts and are one step closer to encouraging the adoption and creation of open educational resources (OER) at their higher institutions. Still, a few academic libraries initiated OER library guides and advocates for OER during library skills and library briefing programs for their students.

The situation indicates low involvement and engagement between libraries and faculty members, which stipulate a crucial need for libraries to be more engaged with educators in supporting OER development. Academic libraries can collaborate to guide faculty in discovering, creating, disseminating, identifying, adopting, and assessing open and affordable course content (Sutton and Geuther 2020). The conclusions of this study indicate that academic libraries need to promote their librarian's expertise and competencies among faculty members and stakeholders, which led to librarians' contribution to the OER initiatives.

CONCLUSION

The widespread use of OER makes a significant difference in democratizing access to high-quality open education. Although academic librarians at higher education institutions are aware of and interested in OER and open educational practices, several challenges need to be overcome to achieve their potential roles. In developing and managing OER, academic libraries may play a big role. However, it is debatable whether this role would be as a creator of OER or a helper in creating OER and making it accessible to the end users as other digital library resources. As future recommendations, the implementation of an OER program at campus or faculty should be collaborative in nature. Libraries should collaborate more about creating partnerships with other organizations with common goals and aspirations towards OER. More fostered collaboration among libraries and various departments will produce best practices in expanding the range of OER movement in fostering open education.

REFERENCES

Ahmed, Mahfooz, and Roslina Othman. 2021. "Readiness towards the implementation of open science initiatives in the Malaysian Comprehensive Public Universities." *The Journal of Academic Librarianship* 47 (5): 102368. https://doi.org/10.1016/j.acalib.2021.102368.

Baas, Marjon, Robert Schuwer, Ellen van den Berg, Tjark Huizinga, Roeland van der Rijst, and Wilfried Admiraal. 2022. "The role of brokers in cultivating an inter-institutional community around open educational resources in higher education." *Higher Education*.https://doi.org/10.1007/s10734-022-00876-y.

Bhandigadi, Phalachandra. 2020. *OER and its implementation at Wawasan Open University (WOU), Malaysia*.

 Bond, Jeffrey D, Boglarka S Huddleston, and Alysha Sapp. 2021. "Faculty Survey on OER: Perceptions, Behaviors, and Implications for Library Practice." *Journal of Librarianship and Scholarly Communication* 9 (1).

Carlson, Jake, and Lisa Johnston. 2015. *Data information literacy : librarians, data, and the education of a new generation of researchers*. 1 online resource (x, 271 pages) : illustrations vols. West Lafayette, Indiana: Purdue University Press.

Clemons, Jessica, and Roger C Schonfeld. 2016. "Why should librarians be involved in facilitating access to content needed for courses?" *Against the Grain* 28 (5): 7.

Darling-Hammond, Linda, Lisa Flook, Channa Cook-Harvey, Brigid Barron, and David Osher. 2020. "Implications for educational practice of the science of learning and development." *Applied Developmental Science* 24 (2): 97-140. https://doi.org/10.1080/10888691.2018.1537791.

Huang, Ronghuai, D Liu, A Tlili, S Knyazeva, TW Chang, X Zhang, D Burgos, M Jemni, M Zhang, and R Zhuang. 2020. "Guidance on open educational practices during school closures: Utilizing OER under COVID-19 pandemic in line with UNESCO OER recommendation." *Beijing: Smart Learning Institute of Beijing Normal University*.

Hussain, Ashfaq, Khalid Mahmood, and Farzana Shafique. 2008. "Perceptions of LIS professionals about digital libraries in Pakistan: the Pakistani perspective." *Electronic Journal of academic and special librarianship* 9.

Kimball, Rusty, Derek Halling, Bruce Neville, and Bruce Herbert. 2022. "OASES: The role of subject librarians in an effective campus OER program." *The Journal of Academic Librarianship* 48 (3): 102518. https://doi.org/https://doi.org/10.1016/j.acalib.2022.102518. https://www.sciencedirect.com/science/article/pii/S0099133322000349.

Nurul Diana Jasni , Noorhidawati Abdullah, and Yanti Idaya Aspura Mohd Khalid. 2022. "Current Landscape of Open Educational Resources Initiatives from Malaysian Higher Institutions: The Rise Amidst the Pandemic." Pakistan Library Association International Conference, University of the Punjab, Lahore.

Ossiannilsson, Ebba. 2021. "Open Educational Resources as a Catalyst for Innovation and Lifelong Learning: A Question of Human Rights and Social Justice." *Macro Management & Public Policies* 3. https://doi.org/10.30564/mmpp.v3i1.2925.

Pontika, Nancy. 2019. "Roles and jobs in the open research scholarly communications environment: analysing job descriptions to predict future trends." *LIBER Quarterly* 29: 1. https://doi.org/10.18352/lq.10282.

Ramirez-Montoya, Maria-Soledad. 2020. "MOOCs and OER: Developments and contributions for open education and open science." *Radical Solutions and Open Science: An Open Approach to Boost Higher Education*: 159-175.

Soehner, Catherine, Catherine Steeves, and Jennifer Ward. 2010. "E-science and data support services: a study of ARL member institutions."

Soon Fook, Fong. 2019. *UNESCO Workshop on National Policy on Inclusive Open Educational Resources Report.* Center for e-Learning, Universiti Malaysia Sabah. https://oer.ums.edu.my/handle/oer_source_files/1500.

Sutton, Sarah W., and Christina Geuther. 2020. "Open Educational Resources: Building Collaborative Bridges." *The Serials Librarian* 78 (1-4): 64-68. https://doi.org/10.1080/0361526X.2020.1697138. https://doi.org/10.1080/0361526X.2020.1697138.

Thompson, Seth D., and Adrienne Muir. 2020. "A case study investigation of academic library support for open educational resources in Scottish universities." *Journal of Librarianship and Information Science* 52 (3): 685-693. https://doi.org/10.1177/0961000619871604.

Thornton, Elaine. 2021. "Academic Librarian Experiences and Perceived Value of OER Professional Development: A Case Study." Ed.D., University of Arkansas (28648743). http://search.proquest.com.ezaccess.library.uitm.edu.my/dissertations-theses/academic-librarian-experiences-perceived-value/docview/2582804463/se-2?accountid=42518.

Todorinova, Lily, and Zara T. Wilkinson. 2020. "Incentivizing faculty for open educational resources (OER) adoption and open textbook authoring." *The Journal of Academic Librarianship* 46 (6): 102220. https://doi.org/10.1016/j.acalib.2020.102220.

UNESCO. 2007. *Education for All: Will We Make It?*: Unesco.

Wiley, David, TJ Bliss, and Mary McEwen. 2014. "Open educational resources: A review of the literature." *Handbook of research on educational communications and technology*: 781-789.

William, and Flora Hewlett Foundation. 2008. Open educational resources (OER)–making high quality educational content and tools freely available on the web.
Zainuddin, Nurkhamimi, Rozhan Idrus, Najwa Mohd Alwi, and Ahmad Farid Jamal. 2017. *Towards National Policy Guidelines on Open Educational Resources in Malaysia*.