



An evaluation of the challenges faced by Namibian open and distance learning faculty members on the use of open educational resources

Edwig Karipi

Head of Open Schooling, Department of Teaching and Learning (Education), Namibian College of Open Learning, Windhoek, Namibia

Abstract

This study aims to evaluate the challenges in the use of OER faced by faculty members of the Namibian Open Distance Learning institutions. This study selected 24 faculty members as participants from the three Namibian ODL institutions, namely, The Namibian College of Open Learning, Centre for Life Long Learning at the University of Science and Technology as well as Centre of Distance and e-Learning at the University of Namibia. The study adopted a qualitative methodology and a case study research design underpinned by interpretivist paradigm. Interview guides were used to collect and analyse data. The results of this study indicate that lack of policies to guide the use of OER within the institutions remains the biggest challenge that prevents faculty members to use OER in teaching and learning. Other challenges such as lack of technical skills, limited knowledge on copyright issues was also recorded. The findings provide valuable insights to Namibian ODL institutions in devising strategies to enhance the adoption and use of OER for teaching and learning within institutions. The study formulated recommendations to address the identified challenges.

Keywords: Open education resources, faculty members, open and distance learning, pedagogical approach, teaching and learning

Introduction

OER was first coined by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2002 to allow authors to give permission to all educators and students to use, reuse, repurpose their content freely with no copyright restrictions (UNESCO, 2019). Furthermore, in developing economies such as Namibia, Open Educational Resources (OER) hold promise in offering fair access to education for individuals living in rural areas who may be unable to attend formal educational institutions (Mishra & Yadav, 2020) [27].

In Namibia, government funded Open and Distance Learning institutions namely, the Namibian College of Open Learning (NAMCOL), the Centre for Open, Distance, and eLearning (UNAM-CODEL) at the University of Namibia, and the Centre for Open and Lifelong Learning (COLL) at the University of Science and Technology (NUST-COLL) formed partnership through the Namibian Open Learning Network Trust (NOLNet), to work together and to facilitate collaborative agreements between institutions. Through NOLNet, ODL institutions has drafted an OER sector policy to guide the development of institutional OER policies within the country.

The use of OER in ODL not only reduce the cost to education but has a primary potential to enhance access to quality learning content especially to learners from disadvantage backgrounds as well as those with personal responsibilities that prevents them to attend physical classes (Butcher, 2015; Conole, 2012) [3, 8]. Literature, however, indicates that Open Distance Learning (ODL) as well as Higher Education Institutions (HEIs) have not considered OER as critical for their success in programme offering (Jacobi & van der Woert, 2012) [20], which can potential hamper the quality of learning resources.

In Namibia, the introduction of OER occurred in 2008 through the COL OER project facilitated by the

Commonwealth of Learning (Ferreira and Gunthier, 2013) [15]. The COL OER project aims to promote the use of OER in ODL in order to increase and widen access to quality learning resources by learners. Nevertheless, as highlighted in the report by Shalyefu, Nekongo & Amadhila, (2022) [32] on lifelong learning, the use of OER by faculty members within public ODL institutions remains problematic. Consequently, many institutions continue to rely on print-based materials as the primary mode of teaching and learning (Lwoga, 2012; Nyandara, 2012 cited in Mtebe & Raisamo, 2014) [23, 29, 28].

While existing literature suggests that faculty members in ODL institutions acknowledge the potential of OER in reducing the educational expenses, (De Hart *et al.*, 2015) [11], there is a lack of specific literature concerning the advancements made by Namibian ODL institutions in the adoption of OER, along with the challenges encountered by faculty members when integrating OER into teaching and learning Literature further shows that faculty members are challenged in using the OER due to lack of skills, time as well guiding policies (Dumbraveanu, 2020) [12]. This study aims to assess the obstacles hindering the effective implementation of OER as a pedagogical approach in ODL institutions in Namibia.

This paper specifically addresses the challenges encountered by faculty members in utilising OER as a pedagogical tool. The objectives of this study are to:

- study the specific challenges encountered by Namibian ODL faculty members in intergrating OER in their teaching practices.
- investigate technical barriers and limitations that prevent faculty members to access, share and modify OER for teaching and learning.
- assess the adequacy of instutional support available to the Namibian ODL faculty members to be able to effectively use OER in teaching and learning.

Literature Review

1. Introduction

This study evaluates the challenges faced by the faculty members of the ODL institutions in Namibia on the use of OER.

The idea of Open Educational Resources (OER) remains fresh in numerous countries, particularly in developing regions like Namibia. Numerous institutions have yet to delve into OER initiatives, resulting in a lack of noticeable impact from OER within developing countries (Bliss *et al.*, 2013) [2]. Similarly, developing countries, especially in Africa have experiencing shortage of qualified teachers (UNESCO, 2015) [37], which resulted in poor performance of learners (Fong-Yee & Normore, 2013; Harris & Sass, 2011) [17, 18]. Teachers in developing countries have to put in more effort to produce results due to challenges such as lack of basic resources, poor connectivity networks, underfunding and unstable political environments (Cobbold, 2015) [6].

2. Specific challenges that hamper OER intergration by ODL faculty members

Open educational resources are perceived to be secondary to the copyrighted material by many institutions, which prevents faculty members to use them effectively (Bliss *et al.*, 2013; Clements & Pawlowski, 2012) [2, 5]. This, however, contradicts other views that confirm the quality of OER and their suitability for use in education (Hylén, 2017; Kurelovic, 2016) [19, 22]. The ODL institutions in Namibia currently cater for about sixty thousand learners. This number could double if faculty members adopt OER as an alternative pedagogical approach to increase access to quality learning materials.

Developing Open Educational Resources (OER) is a time-consuming process. Despite their accessibility, faculty members require significant time to search for, assess, and adapt OER to suit their specific educational needs. Regrettably, many institutions do not have systems in place to incentivise the creation of OER (Rolf, 2012) [31]. However, OER have the potential to replace copyrighted materials, and the resulting cost savings could serve as an incentive for developers (McCrea, 2012) [25]. McCrea (2012) [25] further emphasised the need for institutions to establish coordinated structures for OER adoption, as the abundance of available resources can be overwhelming. Moreover, a considerable amount of OER content requires contextualisation to align with particular educational contexts. Torres (2013) [34] noted that faculty members may be reluctant to invest time in contextualising content that will be freely shared.

3. Technical barriers and limitations that prevent the access of OER by faculty members

Faculty members, therefore, play a crucial role in the use, re-use and distribution of OER within the institution. Literature, however, indicates that the digital divide and limited skills among teachers hamper the effective use of OER for teaching and learning (Dumbraveanu, 2020) [12]. Dumbraveanu 2020 [12] in his study further alluded to the attitude, awareness and the ability of teachers to utilise ICT and digital tool as major challenge to the effective use of OER in teaching and learning. Although Namibia has enforced the intergration of ICT in education, one cannot rule out that there are still faculty members who struggle to

utilise ICT in teaching and learning. This was confirmed by the participants of the COL OER for Open schooling project who indicated that they never had email addresses prior to the project (Ferreira & Gauthier, 2013) [15]. Similarly, the study conducted by Phalachandra and Abeywardena, 2016 [30] discovered that many teachers in developing countries still do not have access to computers and internet connections.

The same ICT related challenges are being experienced by learners in many developing countries. Cheawjindakarn, Suwannathachote and Theeraroungchaisri (2012:63) [4] stated that access is the defining factor for institutions to decide on the appropriateness of technology for ODL. Typical challenges in Namibia range from low bandwidth, ICT skills, poor connectivity as well unfordable devices. This implies that the success for OER adoption requires proper assessment to determine the technological readiness of the institution (Cooney, 2017) [9].

The pedagogical quality of OER is considered a hindrance to the optimal utilisation of OER courseware. According to Mackenzie (2013) [24], OER-based courseware typically incorporates multimedia elements such as animations, videos, images, audio, and print media. Hence, it is essential to meticulously structure the learning content to facilitate cognitive learning in a coherent manner. Nevertheless, numerous scholars advocate in favor of the quality of OER.

4. Institutional support available to the faculty members to ensure effective use OER in teaching and learning

In Namibia, the introduction of Open Educational Resources (OER) occurred through the OER for Open Schooling project, which was funded by COL. This paper delineates OER sustainability as an institution's capacity to sustain the OER project independently, without reliance on external funding. The ongoing reduction in government subsidies for institutions raises serious concerns regarding the long-term sustainability of OER (Zaid & Alabi, 2020) [40].

Literature further indicates a lack of policies as a major challenge that prevent institutions to implement OER (Kurelovic, 2016) [22]. In Namibia, the Namibian Open Learning Network Trust (NOLNeT) developed an ODL policy and has drafted an OER policy to guide the partners to engage in OER institutional policies. Although the Namibian College of Open Learning (NAMCOL) has an approved OER policy in place, it does not guarantee the implementation thereof.

Methods and Procedures

This paper adopts a qualitative approach and a multiple case study design to explore the challenges faced by faculty members within the Namibian ODL system regarding the use of OER. Due to the explorative nature of this study, interpretivist paradigm was preferred compared to the positivist. The interpretivist paradigm allows the investigation through interaction with the faculty members to construct the truth regarding the phenomena (Creswell, 2012) [10].

The multiple case study design permits the scope of the study to be narrowed to limit the participants (Yin, 2013) [39]. This study specifically focused on faculty members from the three institutions who are directly involved in teaching and learning as participants. The sample was further narrowed to those faculty members who have served their institutions for more than one year in either full-time or

part time capacity. The sample therefore, encompasses various faculty members based on their roles within institutions, such as Tutors, Online Facilitators, Part-time Content Developers, Programme Developers, Student Support Officers, Instructional Designers, and Academic Support Officers from all three institutions. To ensure comprehensive data collection and a thorough understanding of the subject, eight (n=8) participants were chosen from each institution, resulting in a total sample size of twenty-four (n=24) participants.

A semi-structured interview guide was crafted to gather data from the participants. Written permission to conduct interviews was obtained from all three institutions. Prior to the interview, participants provided consent by signing a consent form. The recordings were then shared with the participants for validation and to ensure the accuracy of the data.

Data analysis followed an inductive approach, enabling simultaneous analysis during collection, free from preconceived categories (Creswell, 2012) [10]. Themes and subthemes emerged and were identified during data collection, then organised accordingly. Data sets were coded and merged into categories (McMillan & Schumacher, 2014) [26]. Identified themes reflected similar responses regarding challenges encountered by faculty members in utilising OER. These themes were subsequently scrutinised and compared with existing literature to confirm or challenge findings (Creswell, 2012; Thorne, 2000) [10, 33].

Following the acquisition of an ethical clearance certificate from UNISA (certificate number: 2018/05/16/44944748/16/MC), permissions to collect data were obtained from the respective institutions. Data collection was conducted through interviews. Each participant was visited by the researcher to coordinate a suitable interview time and to discuss the ethical considerations of the study. Participants provided consent by signing consent forms. The semi-structured interviews were recorded using a cell phone and stored on a laptop for transcription purposes. Subsequently, all transcribed data was emailed to participants for verification and validation.

Findings

1. Introduction

This study involved a total of 24 (n=24) faculty members as participants. The short codes, P1 to P24 were used to conceal the names of the participants and to maintain confidentiality. Demographic information such as age, gender, work experience as well as academic qualifications was collected to provide an understanding of the background characteristics of the participants. The participants were requested to answer the following questions; what are the specific challenges encountered by Namibian ODL faculty members in intergrating OER in their teaching practices? What technical barriers and limitations prevent faculty members to access, share and modify OER for teaching and learning? Do institutions provide sufficient support to the faculty members to be able to effectively use OER in teaching and learning?

The recurring themes identified in the data were organised into sub-themes, which included issues such as quality, comprehension of open licensing, connectivity obstacles, skills and time, inadequate support from institutions.

2. The Quality of OER

Interms of the specific challenges that faculty members expressed discomfort with the notion that OER are in the public domain and can be freely edited and shared by anyone, potentially leading to concerns about their reliability and credibility.

“Trust, for an academic is to be alert. If you get something from OER, you should not just take it from there. Read with caution, to ensure that, what you get, is what you need.” (P8)

“OER can be of poor quality. Quality is a concern.” (P19).

In addition to content quality, faculty members expressed concerns regarding the contextualisation process of OER. Faculty members noted that often the available OER materials lack relevance to their particular context, thereby impacting their quality. They emphasised:

“Findings relevant materials is a challenge. A lot of materials found are generated by experts all over but rarely things that are more relevant in terms context. You spend a lot of time looking for relevant OER.” (P23).

“OER need adaptations and contextualisation, you don’t get exactly what you want.” (P20).

The perspectives outlined above indicate that faculty members feel hesitant about utilising and reusing OER due to perceived issues with their quality and the necessity for contextualisation.

3. The comprehension of open licensing

The faculty members exhibited a restricted understanding of open licensing, hindering their ability to effectively utilise OER within their institutions. Their exact statements are as follows:

“People may not understand OER, it can be a new technology to them.” (P4).

“Lack of knowledge, people don’t understand the value of openness.” (P17).

“Culture, people tend to think that if something is open then is low quality. Is a perception that the cheaper the low quality? Ignorance, people are not aware.” (P21).

These views indicate that faculty members harbor apprehensions stemming from unfamiliarity with open licensing. They believe that authors should safeguard their work, and permissions should be obtained for the use of others' work.

4. Connectivity obstacles

Faculty members were requested to identify technical obstacles and constraints that could impede their ability to access and distribute OER to their students. They strongly believed that despite the perception of OER being free, institutions would need to invest significant funds to ensure equitable access for students. Their expressions were:

“Access to the internet and devices, regional centres do not have access. Students in rural areas have to travel and pay to go to towns for access.” (P12.)

“Lack of connectivity for students, such students might not much benefit from OER.” (P17).

“There is no money to provide devices to learners to have access to resources, unavailability of internet and low bandwidth makes difficult to provide a wide range of resources. Another challenge will be a connectivity issue. Rural areas are very vast and people are scattered. People will still need to travel to get access.” (P2).

5. The management of time and poor skills

Faculty members in this study identified a shortage of time as a significant challenge hindering the integration of OER into teaching and learning practices. Tutors among the faculty indicated a lack of allocated time during their schedules to engage with and utilize online OER. Additionally, faculty members highlighted a lack of proficiency in utilising digital tools as a challenge affecting their time management.

“Lack of time to develop OER, developers don’t have time, because they are part-time, and they do have their own full-time jobs.”

“It takes time to connect to the internet and a period is only one hour long. I don’t get time to use them within one hour.” (P6).

6. Support from institutions

The sustainability of Open Educational Resources (OER) within institutions relies heavily on the policies governing their adoption. Many faculty members reported being unaware of any OER policy within their institutions to guide their use. Furthermore, faculty members suggested that policies should outline how profits generated from selling learning resources would be managed when free OER are adopted. Some faculty members also proposed a re-evaluation of the promotion of published textbooks to encourage the use of OER in educational settings.

“Policy guidelines on incentives. It will be helpful to adopt OER if there are policy guidelines on recognition and incentives.” (P17).

“The biggest challenge for us is the fact that we make money from our books. It is very difficult to convince management to convert our books to OER. We are required to make money for ourselves.” (P2).

Discussions

The literature reviewed in this study clearly indicates that educators, particularly in developing nations, face numerous obstacles that hinder their involvement in technology-enhanced learning (UNESCO, 2015; Fong-Yee & Normore, 2013; Cobbold, 2015) [37, 17, 6]. OER primarily comprise digital resources that are freely available for use by teachers and learners, aiming to address the issue of limited access to learning materials.

While some of the reviewed literature, such as studies by Hylén (2012) and Kurelovic (2016) [22], presented positive findings regarding the quality of OER, faculty members within Namibian public ODL institutions expressed reservations on this matter. Participants in this study voiced concerns that OER, being in the public domain, lack guaranteed quality. Another challenge affecting the quality of OER is context. Torres, 2013 [34] and McCrea, 2012 [25] suggested in their studies that contextualising OER consumes time, which discourages teachers from utilising them for teaching and learning purposes. The findings of this study align with this literature, affirming that many OER are developed for diverse contexts and require adaptation to be effectively employed in specific environments, thus impacting their quality.

In this study, Namibian ODL institution faculty members highlighted a shortage of ICT infrastructure and lack of connectivity for learners as a significant challenge. This finding contradicts existing literature, which often underscores access to technology as pivotal for the effective

adoption of innovations (Cheawjindakarn, Suwannathachote, & Theeraroungchaisri, 2012) [4]. Time management has also emerged as a significant obstacle to the utilisation of OER. Faculty members highlighted that searching for OER is particularly time-consuming, especially within the constraints of their teaching schedules. Literature underscores the importance of implementing a well-organized structure to streamline the process of searching for and evaluating OER (McCrea, 2012) [25].

Regarding institutional support for integrating OER into teaching and learning, as well as sustaining OER, the absence of policies within institutions emerged as a primary challenge. Without such policies, the adoption of OER remains a distant prospect (Kurelovic, 2016) [22]. Other challenges identified in this study, such as the absence of incentives for developers, the sale of study materials by institutions, and resistance among academics to publish in open journals, are directly attributable to the lack of policies.

In conclusion, this study regards the perspectives of faculty members as pivotal to the successful adoption of OER. It offers empirical evidence indicating that faculty members at Namibian ODL institutions encounter significant hurdles in their endeavours to incorporate OER into teaching and learning practices.

Conclusion

This study recognises the pivotal role faculty members play in the successful integration of OER within ODL institutions, hence their perspectives were deemed crucial to facilitate a seamless OER adoption process. The study revealed that despite the evident effort from faculty members to incorporate OER and broaden access to high-quality learning resources, challenges persist due to identified factors.

There is still a prevalent belief among faculty members that the quality of OER may be compromised through modifications and sharing. The defining characteristic of OER is their free and open license. This study revealed that that open licensing is a novel concept, and there's a perception that materials offered for free may be of inferior quality.

Additional challenges highlighted in this study, including technological infrastructure limitations, insufficient skills among faculty members, and difficulties in time management, adversely impact the successful integration of OER into teaching and learning.

An important revelation of this study is the absence of OER implementation policies within the ODL institutions. The lack of such policies within institutions leads to a lack of guidance regarding OER implementation.

Recommendations

The findings of this study gave rise to several implications. Firstly, there is a clear need to educate and raise awareness about open licensing among faculty members. Secondly, institutions should prioritise investment in affordable ICT infrastructure for both learners and staff, along with providing faculty members with necessary technology skills. Thirdly, collaboration among institutions is essential to expedite the development and implementation of institutional OER policies, which will provide guidance for the adoption and utilisation of OER within educational settings. Additionally, further research could be conducted to explore the perspectives of ODL students regarding the challenges they encounter when utilising OER.

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