Dismantling the education exclusion zone: Empowering OER authors towards inclusive design

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Traditional textbook publishing magnifies some voices while silencing others, pushing consistently marginalised groups into an education exclusion zone. Open educational resources (OER) purportedly address this problem; however, without adequate guidance on inclusive design, OER fail to rise to the challenge. This paper undertakes an exploratory initial review of EmpoweredOER, a practical tool in first-phase iterative development, designed to unpack the complexities of inclusive OER. Emerging from a grant-funded international study tour, three best practice themes informed the design of EmpoweredOER: true accessibility, beyond technological; universal design for learning and inclusive open education nexus; and diverse perspectives and representation. Initial findings indicate EmpoweredOER meets its objective. Future research will analyse the impact and growth of EmpoweredOER as it matures.

Keywords: open educational resources (OER), open educational practice (OEP), social justice

Introduction

There is an underrepresentation of diverse voices in higher education learning materials, which excludes marginalised groups from fully participating in further education and knowledge sharing (Cohen & Cohen, 2023; Coyne & Alfis, 2021; Nusbaum, 2020). The accessible nature of open educational resources (OER) promises to alleviate the issue of closed publishing practices where the powerful few decide who is heard and who is excluded (Hollich, 2022). OER are “learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others” (UNESCO, 2019). Many studies have shown that OER can help to rebalance representation by removing the traditional publishing ‘gatekeeper’ and enabling flexible interpretations of the textbook (Herbert, Clinton-Lissell & Supinsky, 2022; Lambert & Fadel, 2022; Paskevicius, 2017; Tualaulelei & Green, 2022). However, the reality is OER alone cannot achieve this goal because OER itself is not the goal. OER is the vehicle to the goal of dismantling the education exclusion zone. Providing the means without the method has left many open education practitioners unsure how to move forward, out of their familiar structure and into one of inclusive co-creation (Coyne & Alfis, 2021; Lambert & Fadel, 2022; Stagg et al., 2023). The rise of digital technology in our everyday lives has seen an abundance of tools developed to assist with the creation of technologically accessible OER. By contrast, the scarce guidance on how to create or evaluate OER for inclusion, diversity and equity is demonstrated by the relatively few existing OER that meet these needs. While limited practical tools exist to guide Australian open education practitioners, our counterparts in North America have successfully built numerous systems, programs and toolkits to support the same goals (BCcampus, 2019; Government of Canada, 2019; Grotewold et al., 2021; Simmons et al., 2022; University of Minnesota, 2022) – resources ripe for curation and contextualisation for the Australian audience. This paper reports on the information gathering, scoping, and first-phase development of such a resource for Australian practitioners arising from Libraries of the Australian Technology Network (LATN) Fellowship funding, and a subsequent round of user evaluation. The paper will conclude with actionable implications for others seeking to improve their OER.

Background and Libraries of the Australian Technology Network Fellowship

The issue of rising textbook costs has been well-researched, with many studies finding that reducing textbook costs increases student retention and attracts prospective students (Clinton & Khan, 2019; Herbert, Clinton-Lissell & Supinsky, 2022; Hilton III, 2020; Nusbaum & Cuttler, 2020), improves student success rates, and reduces the gap between “White and non-White students’ academic performance” (Colvard et al., 2018, p. 269). However, as the paucity of diverse voices in educational resources permeates throughout a course, the impact compounds. When students are unable see themselves represented in the course materials, they are subconsciously told this course is not for them (Coyne & Alfis, 2021; Hollich, 2022; Nusbaum, 2020). Likewise, when course materials are designed for one way of learning, all other learners are disadvantaged (Cohen & Cohen, 2023). In their national scoping study, Lambert and Fadel (2022) recognised the opportunity...
for OER to not only ease textbook costs, but to redress the social justice issues caused by the traditionally exclusive textbook publishing model.

OER also offer the chance to rethink course delivery and lean into open educational practices to enable a more inclusive curriculum, revealing the interconnectedness of OER, Universal Design for Learning (UDL) and social justice (Bali, Cronin & Jhangiani, 2020; Blomgren, 2018; Paskevicius, 2017). UDL principles recognise there is no ‘typical’ way of learning and it is, therefore, necessary to design learning experiences that invite, encourage, and address multiple learning needs. Thus, harnessing the strengths of OER and UDL, instructors are empowered to reposition their roles to become facilitators of co-created learning, collaborating with their students to co-develop course materials which are contextualised and reflective of their own communities (Glapa-Grossklag, 2018; Kimball et al., 2022; Kohout-Tailor & Sheafer, 2020). Many resources are available to support the creation of OER (e.g. Commonwealth of Learning, 2015; BCcampus, 2023; Gong, 2023) and some specifically address issues of diversity and inclusion (e.g. Burnett et al., 2019, ch. 6; Jisc, 2021); however, these have been primarily developed in an international context. There exists an identified gap in practical support at the nexus of OER and inclusive design in Australia (Lambert & Fadel, 2022; Stagg et al., 2023; Tualalaulelei & Green, 2022). In response, in 2022, a LATN-funded Fellowship project proposed to develop a practical resource to empower Australian open education practitioners to create and evaluate OER which influence greater diversity and inclusion in pedagogical practice. The project involved an international study tour to visit multiple leading North American institutions where inclusive OER practices have been successfully implemented and supporting tools developed which could be adapted for Australian use. Through semi-structured interviews with local librarians, academics and students involved in developing and implementing inclusive OER practices, the following key best practice themes emerged:

1. **Accessibility – Beyond Technological**
   True accessibility is more than technological access, such as optimising texts for the use of screenreaders. It includes analysing all types of barriers to educational materials, such as cost, Internet access, learning design, multimodal format availability, language, cultural representation, and digital literacy.

2. **Intersection of Universal Design for Learning (UDL) and Inclusive Open Education**
   Many UDL goals align with those of inclusive open education. The mature UDL field, thus, provides a framework to be adapted for the comparatively nascent inclusive open education field.

3. **Perspective and Representation**
   The perspectives included in, and excluded from, an educational resource, and whether students feel represented in the material, impact its inclusivity and contextual relevance. Furthermore, critical self-reflection of the lens through which an author creates a resource is essential during the creation process to mitigate unconscious bias and acknowledge the limits of their perspective.

These themes informed the development of EmpoweredOER, a website and practical tool dedicated to unpacking the complexity of inclusive open educational resources by providing simplified explanations and concrete examples of good practice. This paper is an exploratory initial review of EmpoweredOER as the first phase in an iterative development plan. With limited resources to publish a fully developed site, a design thinking strategy was implemented to publish the initial site for critique to determine, based on user feedback, where to focus development attention. In addition to usage statistics and qualitative feedback, the site has also received peer review from learning design and copyright perspectives, with recognition that further peer review from diverse perspectives is needed.

**EmpoweredOER**

EmpoweredOER builds upon, and contextualises for the Australian audience, the Equity Rubric for OER Evaluation (Grotewold et al., 2021) which addresses all three best practice themes uncovered by the project. The framework was developed in the United States by the Branch Alliance for Educator Diversity to guide instructors through examination of their course materials against four dimensions of equity: Learner-Centred, Critical, Culturally Sustaining, and Universally Designed for Learning. The dimensions are segmented into 22 criteria, each with rating scales and key indicator tips. EmpoweredOER further deconstructs the task by grounding each dimension in concrete examples of good practice found in published works. Criteria are contextualised through Australian examples wherever possible and reflective notes where Australian examples could not be sourced or context should be considered as not directly transferrable. For example, a resource referenced in the Pluralism criterion of the Culturally Sustaining dimension includes an explanatory note that the resource was “created in Canada and focuses on the Indigenous peoples in the British Columbia region” (Barber, 2023a). To enhance usability, EmpoweredOER includes supplementary resources to guide practitioners through their exploration of the multiple layers of equity ([https://empowerdoer.com/](https://empowerdoer.com/)).
Impact and usage

Quantitative data – Usage statistics

Published in early 2023, EmpoweredOER was officially launched in May 2023 via a webinar presentation to Australian and international open education colleagues. The site has since garnered 17 subscribers and the usage data shows EmpoweredOER has had approximately 1,500 views from visitors in 15 countries who have downloaded 245 files and explored 159 links to external resources. Naturally, the homepage is the most visited and, with early-stage data, it is unclear as yet how many people go on to explore the rest of site. However, the site has wide geographical reach and locations with the highest usage include those visited for the Fellowship and those with ASCILITE Australasian Open Educational Practice Special Interest Group (OEP SIG) membership, all of which have been kept informed of the project’s progress. The external link click data may indicate the curated resources most valued by users. However, it may also indicate these resources are simply most visible and other, less clicked resources, are more obscured or their relevance is inadequately articulated. Interestingly, accounting for 81 of the 245 file downloads (33%) are printable versions of site pages which indicates they are a useful accessibility design measure and should continue to be included as new pages are added and revised. The highest traffic periods for the site reflect key events that occurred during those months or days:

2. April 24 (55 views, 15 visitors): Blog post, *Lost in the Open Sea* (Barber, 2023c), on the Council of Australian Librarians (CAUL) Digital Dexterity blog, discussing EmpoweredOER and promoting the launch. Again, traffic was high across the month with a total of 528 views and 171 visitors.
3. June 13 (43 views, 22 visitors): Two blog posts published on the site, generating automatic emails to subscribers and posts to LinkedIn and Mastodon. A manual post was also made to Twitter. Traffic rose from 5 views and 3 visitors on the same day of the previous week to 43 views and 22 visitors, demonstrating timely reminders of the website and engaging new content are a fruitful method of drawing visitors.

Qualitative data – Evaluation survey

To supplement the limited timeframe of quantitative data, qualitative user data was gathered via an anonymous evaluation survey to gain a holistic understanding of the initial impact of the site and to inform future development. The survey was convenience-sampled by contacting the EmpoweredOER subscriber list (n=17) and posting to social media. Survey questions comprised three multiple choice, ten Likert scale, and four free text. Seven responses were received – an anticipated low response rate due to two primary factors:

- EmpoweredOER is a new resource and launched during Semester 1 which is traditionally when educators are focused on teaching, rather than curriculum renewal.
- Inclusive educational practice in Australia is relatively new and open educational practice is very new. EmpoweredOER sits at the nexus of these two practices as part of nascent third concept. Thus, the number of practitioners who are actively engaged in this work, and able to provide feedback this early, is limited.

Nevertheless, responses included a great amount of rich description which expanded upon the quantitative data and indicated users find the site useful, engaging, and confidence-building.

Respondents indicated a desire for greater interactivity, as exemplified by two requests for editable versions of the most downloaded pdfs on the site: *Using EmpoweredOER to evaluate a resource*, a pre-filled rubric using a demo scenario to guide users through EmpoweredOER, and *EmpoweredOER evaluation quick check*, a worksheet with brief descriptions of all four equity dimensions and space for resource evaluation notes. Several respondents reported using the site as a learning tool for themselves and their colleagues. For example, one respondent uses EmpoweredOER ‘as a check in for myself when I’m preparing to explain to new open textbook authors the need to create resources that are inclusive, diverse, equitable and accessible. I also share the site with colleagues, as a capability building tool.’ Curiously, three respondents noted the site promotes a sense of community, with one stating, ‘I love your engaging writing style and that your voice comes through in your writing, which gives a sense of speaking to a colleague about what’s important to us about our work.’

Implications for practice and future research directions
Early results demonstrate an appetite for such practical tools as EmpoweredOER and the ability to adapt them to individual contexts. As such, future improvements to the site will incorporate greater interactivity and adaptability. Researchers with expertise in inclusive practices may view these findings as evidence of interest to dedicate resources to adapting and further developing subsections of EmpoweredOER. An unexpected additional finding was the sense of community imbued in EmpoweredOER. Practitioners may benefit from considering this when developing other resources for community use – exchanging high-level technical language for a personal voice may increase the accessibility and uptake of a resource. Initial engagement with the site has already positively impacted the confidence of practitioners when working towards inclusive OER and further review will monitor this key success indicator. Future research will analyse the impact of EmpoweredOER as it matures, ensuring it meets its purpose of demystifying methods of creating and evaluating OER which address: true accessibility, beyond technological; the intersection of universal design for learning and inclusive open education; and diverse perspectives and representation.

Conclusion

EmpoweredOER carries a CC BY-NC-SA 4.0 licence and other practitioners are encouraged to reuse and adapt the content to their own contexts. A work developed through deep partnerships with a diverse range of people, EmpoweredOER seeks to transform digital pedagogy by placing people at the centre of practice. The site is built on collaboration and will continue to grow through review, feedback and contribution from fellow practitioners. With community-informed developments on the horizon, early analysis of EmpoweredOER indicates it is a valuable practical tool that contributes to filling the gap of empowering OER authors towards inclusive design, dismantling the education exclusion zone.

References


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