

OPEN EDUCATIONAL RESOURCES IN HIGHER EDUCATION: A LIBRARY AND INFORMATION SCIENCE PERSPECTIVE ON ADOPTION ROLES, AND GLOBAL BARRIERS

By

Shade Odunola Babatunde, Cln

Dr J. S. Opakunle Library, Osun State Polytechnic, Iree

And

Philip Gana Malgwi, Ph.D Cln

Federal University Otuoke, Bayelsa State.

Corresponding Author: Philmalgwi@gmail.com

Abstract

This opinion paper explores Open Educational Resources (OER) from a Library and Information Science (LIS) perspective, highlighting its broader implications for higher education. Beyond reducing costs and expanding access, OER influences teaching practices, scholarly communication, and professional roles. Drawing on boundary crossing theory, diffusion of innovation, and technology acceptance research, the paper synthesises evidence to argue that OER serves as both pedagogical and scholarly infrastructure. It examines the evolving roles of academic librarians, global and equity considerations, and barriers to adoption. The paper advocates for integrating OER into institutional strategies and LIS practice worldwide, emphasising its potential to transform education. Providing an opinion to these, the paper provides a comprehensive discussion on OER's impact and future directions, making a case for its formal recognition and implementation in academic settings globally. This integration can enhance teaching, learning, and scholarly communication.

Keywords: *Open Educational Resources; Academic Libraries; OER Adoption; Scholarly Communication; Library and Information Science*

Introduction

Open Educational Resources (OER) are teaching, learning, and research materials that are freely accessible and openly licensed for reuse, adaptation, and redistribution. Over the past two decades, OER has gained increasing attention within higher education policy and practice due to rising textbook costs and growing concerns about equitable access to educational resources. While affordability remains a key driver of OER adoption, limiting the discussion to cost savings alone underrepresents the broader academic and professional implications of openness.

Within the field of Library and Information Science (LIS), OER intersects directly with long-standing concerns around access to information, knowledge equity, copyright management, and scholarly communication. Recent empirical research, particularly the work of McBride and Abramovich (2022), provides strong evidence that OER adoption changes how instructors prepare for teaching and how they interact with librarians, instructional designers, and external academic communities. This paper builds on that scholarship by offering an expanded, explanatory opinion on why OER should be understood as a catalyst for scholarly and professional transformation within LIS.

Open Educational Resources (OER) refer to teaching, learning, and research materials that are freely available and openly licensed, allowing users to retain, reuse, revise, remix, and redistribute content. Since their formal introduction by UNESCO in the early 2000s, OER initiatives have expanded globally, driven by rising educational costs, advances in digital technologies, and growing advocacy for open knowledge systems. Within higher education, OER has been promoted primarily as a mechanism for improving access and affordability.

While the affordability narrative remains important, recent research suggests that OER adoption represents a broader transformation of academic and institutional practices. From a Library and Information Science (LIS) perspective, OER intersects with core concerns such as access to information, copyright and licensing, digital scholarship, and equitable knowledge production. This paper, therefore, moves beyond a narrow cost-reduction framing to offer a detailed, theory-informed discussion of OER adoption, professional roles, global relevance, and structural barriers.

Traditional Framing of OER and Emerging Evidence

Early OER scholarship focused heavily on the economic burden of commercial textbooks and the potential of open textbooks to improve student access and academic performance (Feldstein et al., 2012; Hilton, 2016). Empirical studies consistently demonstrate that students

using OER perform as well as, or better than, those using commercial materials, thereby challenging assumptions about quality.

More recent systematic reviews and meta-analyses provide stronger empirical support for these claims. Tlili et al. (2023) found that OER and open educational practices have a positive and statistically significant effect on learning achievement. Similarly, large-scale reviews of OER literature report benefits that extend beyond cost savings to include improved teaching practices, increased collaboration, and enhanced digital competencies among instructors (Bliss et al., 2013). These findings support the argument that OER adoption is not merely a substitution of materials but a catalyst for pedagogical and professional change.

OER Adoption Theories and Conceptual Frameworks

Understanding why and how academics adopt OER requires engagement with established adoption theories. Rogers' Diffusion of Innovation theory has been widely applied to OER research, highlighting factors such as relative advantage, compatibility, trialability, and complexity as key determinants of adoption (Menzli et al., 2022). Studies using this framework reveal that while instructors often recognise the relative advantage of OER, concerns about time, skills, and institutional support can slow adoption.

Complementing this perspective, McBride and Abramovich (2022) conceptualise OER as boundary objects that facilitate boundary crossing between instructors, librarians, instructional designers, and external communities. Through processes of identification, coordination, reflection, and transformation, OER enables instructors to rethink their teaching practices and professional identities. This boundary-crossing perspective is particularly valuable for LIS scholarship, as it foregrounds collaboration and learning across professional domains.

OER and Scholarly Communication

OER challenges traditional models of scholarly communication by enabling continuous revision, local adaptation, and collaborative authorship. Unlike commercial textbooks, OER can be openly shared and improved over time, blurring the boundaries between teaching materials and scholarly outputs. This has implications for academic recognition, intellectual property management, and quality assurance.

Libraries, as custodians of institutional repositories and scholarly infrastructure, are well-positioned to address these challenges. By integrating OER into broader open scholarship strategies, libraries can support more transparent, inclusive, and participatory forms of knowledge production. This perspective strengthens the argument for recognising OER as part of the scholarly communication ecosystem rather than as isolated instructional resources.

Global Perspectives and Equity Considerations

Although a substantial proportion of Open Educational Resources (OER) research and implementation has historically emerged from North America and Europe, the relevance of OER is arguably more pronounced in the Global South, where persistent economic constraints, foreign exchange volatility, and restrictive licensing models limit access to commercial academic resources. The UNESCO (2019) Recommendation on OER underscores OER as a strategic mechanism for advancing inclusive and equitable quality education, particularly in low- and middle-income countries. Empirical studies from Africa, Asia, and Latin America demonstrate that OER can reduce educational costs, localise curricula, and support lifelong learning, yet adoption remains uneven and fragmented (Hodgkinson-Williams & Arinto, 2017; Tlili et al., 2022).

In African higher education contexts, OER adoption is shaped by structural inequalities, including limited digital infrastructure, unstable internet connectivity, and inadequate institutional policy frameworks (Atenas, Havemann, & Priego, 2020). Beyond infrastructural constraints, sociocultural and epistemic factors also play a critical role. Research indicates that concerns over intellectual property, academic recognition, and the perceived prestige of locally produced materials can discourage educators from openly sharing resources (Hodgkinson-Williams & Trotter, 2018; Open Praxis, 2023). These dynamics reinforce what Santos (2014)

describes as “epistemic injustice,” whereby knowledge produced in the Global South is marginalised within global scholarly ecosystems.

From a Library and Information Science (LIS) perspective, addressing these inequities requires context-sensitive strategies that foreground capacity building, institutional incentives, and the validation of indigenous and locally relevant knowledge systems. Libraries, as trusted knowledge intermediaries, are uniquely positioned to support epistemic justice by curating, preserving, and amplifying locally generated OER. When embedded within coherent national and institutional policies, OER initiatives can contribute meaningfully to decolonising knowledge production and fostering more equitable global scholarly communication systems.

The Evolving Role of Academic Librarians in OER Ecosystems

Academic librarians occupy a central and increasingly strategic position within OER ecosystems, functioning as facilitators, policy advisors, instructional partners, and advocates for open knowledge. Empirical studies applying models such as the Technology Acceptance Model and Unified Theory of Acceptance and Use of Technology indicate that librarians generally exhibit positive attitudes toward OER and recognise its alignment with institutional missions related to access, affordability, and student success (Jhangiani et al., 2016; Kim, 2020). Their professional competencies in copyright literacy, Creative Commons licensing, metadata

standards, digital repositories, and long-term preservation position them as critical enablers of sustainable OER initiatives.

Within the LIS domain, OER adoption reflects a broader transformation of libraries from passive custodians of information to active participants in knowledge creation and dissemination. Recent scholarship highlights librarians' roles as "boundary spanners," mediating between faculty, instructional designers, administrators, and legal frameworks (McBride & Abramovich, 2022; Okamoto, 2021). This mediation is particularly vital in contexts where faculty awareness of open licensing and open pedagogies remains limited.

Furthermore, the integration of OER support into scholarly communication services strengthens libraries' engagement with open access publishing, institutional repositories, and digital scholarship initiatives. As Cox and Corral (2023) argue, OER work enables libraries to extend their impact beyond access provision toward shaping teaching practices and academic cultures. In this sense, OER advocacy is not ancillary but integral to the contemporary mission of academic librarianship globally.

Barriers to OER Adoption

Despite its well-documented pedagogical and economic benefits, OER adoption continues to face persistent and multi-layered barriers. Recent systematic reviews identify low levels of awareness, absence of formal institutional policies, limited funding mechanisms, and inadequate

technical and pedagogical competencies as dominant constraints across higher education systems (Tlili et al., 2022). These challenges are particularly acute in developing regions, where OER initiatives often depend on short-term donor funding or the enthusiasm of individual champions, rather than sustained institutional commitment.

Additional barriers include time constraints for academic staff, misalignment between promotion criteria and open practices, and uncertainty regarding the quality and credibility of openly licensed materials (Hilton, 2020; Wiley & Hilton, 2018). For LIS professionals, these obstacles highlight the limitations of fragmented or ad hoc approaches to OER implementation. Without supportive governance structures, clear incentive systems, and integrated professional development programmes, OER adoption risks remaining peripheral rather than transformative.

Libraries can play a decisive role in mitigating these barriers by institutionalising OER support within routine academic services. This includes embedding OER literacy into information literacy programmes, collaborating with teaching and learning centres, and advocating for policy frameworks that recognise OER creation and adaptation as legitimate scholarly outputs. Strategic library-led interventions, when aligned with senior management and national education policies, can significantly enhance the sustainability and scalability of OER initiatives.

Way Forward on OER Adoption in Higher Institutions

Moving forward, effective OER adoption requires a holistic and systems-oriented approach that integrates policy development, capacity building, and cross-sector collaboration. At the institutional level, universities should adopt explicit OER policies aligned with the UNESCO OER Recommendation, clearly defining roles, incentives, and quality assurance mechanisms. Professional development programmes targeting both faculty and librarians are essential for building competencies in open licensing, instructional design, and open pedagogies.

For LIS professionals, sustained engagement in OER initiatives offers an opportunity to consolidate their leadership in scholarly communication and digital knowledge stewardship. Libraries should prioritise partnerships with academic departments, national library consortia, and international open education networks to share best practices and resources. In Global South contexts, particular emphasis should be placed on supporting the creation and dissemination of locally relevant OER that reflect indigenous knowledge, regional research priorities, and linguistic diversity.

Ultimately, the transformative potential of OER lies not merely in cost reduction but in its capacity to democratise knowledge production and access. When supported by coherent policy frameworks, institutional commitment, and proactive library leadership, OER can serve as a powerful instrument for advancing educational equity and reshaping global scholarly communication.

Recommendations

The following were recommended for enhance OER adoption:

1. The Management of Higher Institutions of Learning should develop and implement institutional OER policies to guide adoption and use.
2. Libraries should offer training and capacity-building programs for educators on OER design,
3. The Federal Government should establish a national OER policy framework to guide institutions.

Conclusion

Open Educational Resources represent a significant development in higher education with implications that extend beyond affordability. Drawing on multiple theoretical and empirical perspectives, this paper demonstrates that OER functions as a catalyst for pedagogical innovation, professional learning, and scholarly transformation. For Library and Information Science, OER offers a critical pathway toward more open, equitable, and sustainable knowledge systems.

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