

THE ROLE OF OPEN EDUCATIONAL RESOURCES (OERS) IN PROMOTING AFFORDABLE AND ACCESSIBLE HIGHER EDUCATION

Dr. Pratik. B. Upase Assistant Professor
Department of Commerce, Vidya Bharati Mahavidyalaya, Amravati
Maharashtra, India
pratik.upase@gmail.com

ABSTRACT

The study used a comprehensive review of existing literature on the use of OERs in higher education, including a systematic search of relevant databases and specific inclusion and exclusion criteria. The key findings indicate that OERs have the potential to significantly reduce the cost of higher education and increase accessibility for students, particularly those from disadvantaged backgrounds. The study also identifies several challenges and gaps in the literature, including issues related to OER quality and sustainability, faculty adoption, and institutional support. The review concludes with recommendations for policymakers, administrators, and educators on how to effectively implement and promote the use of OERs in higher education to improve affordability and accessibility. Overall, the study highlights the importance of OERs as a means of promoting affordable and accessible higher education, and calls for continued research and development in this area.

Keywords: Open Educational Resources (OERs), Higher Education, Affordability, Accessibility, Student Success, Institutional Support

Introduction

The cost of higher education has been a major concern for students, parents, and policymakers for several decades. This has led to a significant increase in student debt and has made higher education increasingly unaffordable for many students.

In response to these challenges, there has been growing interest in the role of Open Educational Resources (OERs) in promoting affordable and accessible higher education. OERs are educational resources. They include materials such as textbooks, course materials, videos, and other educational resources that can be accessed online for free.

The use of OERs has the potential to significantly reduce the cost of higher education for students. By providing free access to educational materials, OERs can eliminate the need for students to purchase expensive textbooks and other course materials, which can save them hundreds or thousands of dollars per year. OERs also provide greater flexibility and customization options for course materials, which can lead to more effective teaching and learning.

In addition to promoting affordability, OERs can also enhance accessibility to higher education. By providing free access to educational resources, OERs can help to level the playing field and provide greater opportunities for students from diverse backgrounds to access higher education.

Research Question and Objectives

Research Question: What does existing research suggest about the role of Open Educational Resources (OERs) in promoting affordable and accessible higher education, and what are the implications for higher education institutions, policymakers, and educators?

Objectives:

1. To conduct a comprehensive review of existing literature on the use of OERs in higher education and their impact on affordability and accessibility.
2. To identify trends, gaps, and challenges in the existing literature on the use of OERs in higher education.
3. To provide recommendations for policymakers, administrators, and educators on how to effectively implement and promote the use of OERs in higher education to improve affordability and accessibility based on the findings of the literature review.

Methodology

The methodology used was a comprehensive review of existing literature on OERs in higher education. This methodology involved conducting a systematic search of relevant databases. Data were extracted and synthesized from the selected studies to identify trends, gaps, challenges, and effectiveness of OERs in promoting affordability and accessibility in higher education. The findings were then critically evaluated and

used to provide recommendations for policymakers, administrators, and educators on how to effectively implement and promote the use of OERs in higher education to improve affordability and accessibility.

Literature Review

The existing literature (OERs) in promoting affordable and accessible higher education is vast and diverse, with a range of studies examining different aspects of the topic. The literature can be broadly categorized into three areas: (1) the impact of OERs on affordability and accessibility, (2) the challenges and opportunities of implementing OERs in higher education institutions, and (3) best practices .

Despite the potential benefits of OERs, several challenges and gaps exist in the literature. One of the major challenges is the lack of awareness and adoption of OERs by faculty and administrators (Atenas, 2015). A study by Jhangiani et al. (2018) found that while 88% of faculty members were aware of OERs, only 20% had adopted them in their courses.

Another challenge is the lack of quality control and curation of OERs (Weller, 2014). Since OERs are often created by individuals or small teams without rigorous peer review, there is a risk of inaccuracies, biases, and outdated information in these resources. Additionally, the lack of standardization and interoperability of OERs makes it difficult for educators to find, use, and adapt them for their specific needs (Hilton, 2016).

The use of Open Educational Resources (OERs) in higher education has gained significant attention over the past decade due to its potential to enhance affordability and accessibility. According to Stagg (2020), OERs are openly licensed resources that can be used for teaching, learning, and research purposes. These resources include textbooks, videos, podcasts and other learning materials.

Numerous studies have examined the impact of OERs on affordability and accessibility in higher education. For instance, Hilton (2016) conducted a meta-analysis of 16 studies and found that students who used OERs performed as well or better than those who used traditional textbooks, and also saved a significant amount of money on textbook costs. Similarly, a study by Kimmons and Veletsianos (2016) found that students who used OERs reported higher levels of satisfaction with their course materials and increased engagement with the course content.

In higher education, as a means of improving affordability and accessibility for students. OERs are defined as "teaching, learning and research resources that are free of cost and may be reused, revised, remixed and redistributed" (UNESCO, 2012). They can include a wide range of digital content, such as textbooks, videos, simulations, and interactive learning objects.

Many studies have examined the impact of OERs on various aspects of higher education, including student learning outcomes, student engagement, faculty adoption, and institutional sustainability. Some studies have found that OERs can improve student learning outcomes and engagement, by providing more flexible and personalized learning experiences (Cronin, 2017; Wiley et al., 2014). Other studies have focused on the barriers and challenges to OER adoption, such as the lack of incentives for faculty, the need for technical support, and concerns about quality (Petrides et al., 2011; Bliss et al., 2013).

Despite these challenges, many universities and colleges around the world have embraced OERs as a means of improving access to education. For example, the Open University in the UK has developed a comprehensive OER policy that promotes the use and creation of OERs across all disciplines (Ferguson et al., 2011). In the US, the Open Textbook Network has developed a network of over 800 institutions that have adopted open textbooks as a means of reducing textbook costs (Hilton et al., 2016).

In terms of recommendations for policymakers, administrators, and educators, several studies have highlighted the importance of creating supportive institutional policies and providing faculty with training and resources to effectively use OERs (Hilton et al., 2013; Stacey et al., 2015). Others have suggested the need for collaborative approaches to OER development and dissemination, such as the creation of OER consortia and partnerships between universities and publishers (Atkins et al., 2007; Neumann et al., 2017).

Studies on the impact of OERs on affordability and accessibility have found that the use of OERs can significantly reduce the cost of higher education for students. OERs can eliminate the need for students to purchase expensive textbooks and other course materials, which can save them hundreds or thousands of dollars per year. OERs also provide greater flexibility and customization options for course materials, which can lead to

more effective teaching and learning. In addition, OERs can enhance the accessibility of higher education by providing free access to educational resources for students from disadvantaged backgrounds.

However, studies have also identified several challenges and opportunities of implementing OERs in higher education institutions. These include issues related to copyright and licensing, technical infrastructure, faculty awareness and support, and the need for effective policies and guidelines to promote the use of OERs. Despite these challenges, studies have also identified several best practices and strategies for effectively implementing OERs in higher education institutions, including the use of faculty incentives and training, collaboration between institutions and stakeholders, and the development of effective policies and guidelines.

To effectively implement and promote the use of OERs in higher education, several recommendations have been proposed in the literature. First, there is a need for increased awareness and education about OERs among faculty, administrators, and students (Atenas et al., 2015). This can be achieved through professional development opportunities, workshops, and training programs that focus on the benefits and effective use of OERs in teaching and learning.

Second, there is a need for increased collaboration and networking among OER practitioners and advocates to promote the sharing and dissemination of high-quality OERs (Weller, 2014). This can be achieved through the establishment of OER repositories, open licensing policies, and peer-review mechanisms for OERs.

According to Hilton III (2019), students who use OERs are more likely to complete their courses successfully and have better grades compared to those who use traditional resources. Additionally, the cost savings associated with the use of OERs can be substantial, with studies showing savings of up to \$128 per student per course (Hilton III et al., 2019).

However, despite the potential benefits of OERs, their adoption and implementation in higher education institutions remain limited. Factors that have been identified as barriers to the adoption and implementation of OERs include a lack of awareness and understanding of OERs, the absence of incentives for faculty to adopt OERs, and the lack of institutional support (Hilton 2019). Furthermore, the quality and relevance of OERs have also been questioned, with some scholars arguing that OERs may not always be of high quality and may not meet the needs of all students (Allen & Seaman, 2017).

Despite these challenges, there have been efforts to promote the use of OERs in higher education. For example, the U.S. Department of Education has launched the Open Textbook Pilot program, which provides grants to colleges and universities to promote the use of OERs (Lindshield & Adhikari, 2019). Additionally, some institutions have implemented policies that require faculty to consider OERs when selecting course materials (Hilton III et al., 2019).

Overall, the existing literature suggests that the use of OERs has the potential to promote affordable and accessible higher education, but effective implementation requires careful consideration of the challenges and opportunities involved. Further research is needed to explore the long-term impact of OERs on affordability and accessibility in higher education and to identify additional best practices and strategies for promoting their use.

The existing literature suggests that the use of OERs has the potential to promote affordability and accessibility in higher education. However, there are several challenges that must be addressed to ensure the effective adoption and implementation of OERs. Higher education institutions should provide faculty with the necessary support and incentives to adopt OERs, while policymakers should consider implementing policies that encourage the use of OERs. Educators should also be aware of the potential benefits and limitations of OERs and be able to effectively integrate them into their teaching.

Discussion of the Key Theories, Concepts, and Debates in the Literature

OERs in promoting affordable and accessible higher education is underpinned by several key theories, concepts, and debates. These include:

1. **Open education:** The concept of open education is central to the use of OERs in higher education. Open education is an approach to teaching and learning that emphasizes the free and open sharing of knowledge and resources. OERs are a key component of open education, as they enable educators to share course materials, textbooks, and other resources freely with students.
2. **Cost and affordability:** OERs can significantly reduce the cost of higher education for students. Studies have found that the cost of textbooks and other course materials can be a major barrier to

higher education for students from disadvantaged backgrounds. OERs provide a way to eliminate this cost barrier and make higher education more accessible.

3. Access and equity: The use of OERs can also enhance the accessibility of higher education by providing free access to educational resources for students from disadvantaged backgrounds. This is particularly important in countries and regions where access to higher education is limited by economic, social, or geographical factors.
4. Copyright and licensing: One of the key challenges of using OERs is navigating the complex landscape of copyright and licensing laws. The reuse and remixing of OERs can be limited by copyright restrictions, and educators need to be aware of these limitations when using OERs in their teaching.
5. Faculty awareness and support: Another challenge of using OERs is the need for faculty awareness and support. Many educators may be unfamiliar with OERs or may be resistant to using them in their teaching. Institutions need to provide training and support to faculty to ensure that they are aware of the benefits of OERs and how to use them effectively.
6. Policy and governance: The use of OERs also requires effective policy and governance structures to promote their adoption and implementation. Institutions and policymakers need to develop guidelines and policies that promote the use of OERs, support faculty in using them effectively, and ensure that they are sustainable and scalable over time.

Overall, the literature on the role of OERs in promoting affordable and accessible higher education highlights the importance of open education, cost and affordability, access and equity, copyright and licensing, faculty awareness and support, and policy and governance. These concepts and debates are central to understanding how OERs can be effectively used in higher education to promote affordability and accessibility.

The increasing cost of textbooks and other educational materials has led to the emergence of OERs as an alternative to traditional, costly resources. OERs have the potential to promote affordable and accessible higher education, but their effectiveness in achieving this goal has been the subject of much research and debate. This study provide existing research on the role of OERs in promoting affordability and accessibility in higher education and its implications for higher education institutions, policymakers, and educators.

Findings and Conclusion

Summary of the key findings:

The analysis of the existing literature on the role of Open Educational Resources (OERs) in promoting affordable and accessible higher education has yielded several key findings. First, the use of OERs has the potential to significantly reduce the cost of higher education for students, particularly in developing countries where access to affordable educational resources is limited. Second, OERs have been shown to improve student engagement and learning outcomes, as well as increase access to higher education for underrepresented groups such as low-income and minority students.

Third, the implementation and adoption of OERs in higher education institutions are influenced by a variety of factors, including institutional policies, faculty attitudes and beliefs, technical infrastructure, and funding. Fourth, while there is a growing body of research on the use of OERs in higher education, there are still significant gaps in the literature, particularly regarding the long-term sustainability and impact of OER initiatives.

Finally, the implications of these findings for higher education institutions, policymakers, and educators are clear. Institutions should prioritize the adoption and implementation of OERs as a means of promoting affordability and accessibility, and policymakers should provide support and funding for OER initiatives. Educators should be trained and supported in the use of OERs to enhance student learning, and efforts should be made to address the digital divide and ensure that all students have access to the necessary technology to use OERs effectively. Overall, the findings suggest that OERs have the potential to play a significant role in promoting affordable and accessible higher education, but continued research and investment are needed to fully realize this potential.

Conclusion

Overall, the existing literature suggests that the use of OERs can promote affordability and accessibility in higher education. However, there are challenges that need to be addressed to ensure the effective adoption and implementation of OERs. Higher education institutions, policymakers, and educators should work together to address these challenges and promote the use of OERs to improve the quality and accessibility of higher education.

Scope of Further Research

Despite the growing body of research on the role of Open Educational Resources (OERs) in promoting affordable and accessible higher education, there are still some areas that require further exploration. One possible avenue for future research is to investigate the potential impact of OERs on students' long-term academic and professional outcomes. Additionally, more research is needed to understand the factors that influence the adoption and implementation of OERs in different educational contexts, as well as the challenges that educators face when designing and delivering OER-enabled courses.

Another area of future research is to explore the effectiveness of different strategies for promoting the adoption and use of OERs among students and educators, such as incentives, training, and support. It may also be useful to investigate the potential of OERs to enhance the quality and relevance of higher education, and to provide learners with more flexible and personalized learning experiences. Finally, future research could explore the role of OERs in promoting equity and social justice in higher education, and the extent to which OERs can help to address disparities in access to education and opportunities for learning.

References

- Atenas, J., Havemann, L., & Priego, E. (2015) "Open data as open educational resources: Towards transversal skills and global citizenship". *Open Praxis*, 7(4), 377-389. <https://doi.org/10.5944/openpraxis.7.4.233>
- Atkins, D., Brown, J., & Hammond, A. (2007). "A review of the open educational resources (OER) movement: Achievements, challenges, and new opportunities" Report to The William and Flora Hewlett Foundation.
- Bliss, T., Hilton, J., Wiley, D., & Thanos, K. (2013). "The cost and quality of online open textbooks: Perceptions of community college faculty and students". *First Monday*, 18(1). <https://doi.org/10.5210/fm.v18i1.3972>
- Bliss, T. J., Robinson, T. J., Hilton, J., & Wiley, D. A. (2013). "An OER framework, heuristic, and lens: Tools for understanding lecturers' adoption of OER". *Journal of Interactive Media in Education*, 1(18), 1-16. <https://doi.org/10.5334/2013-18>
- Colvard, N., Watson, C., & Park, H. (2018). "The impact of open educational resources on various student success metrics." *International Journal of Teaching and Learning in Higher Education*, 30(2), 262-276.
- Cronin, C. (2017). "Open education, open questions." *Learning, Media and Technology*, 42(2), 117-120. <https://doi.org/10.1080/17439884.2017.1416323>
- DeRosa, R., & Robinson, T. (2017). From OER to open pedagogy: Harnessing the power of open. *Journal of Interactive Media in Education*, 1(5), 1-10. <https://doi.org/10.5334/jime.440>
- Ferguson, R., Scanlon, E., & Harris, L. (2011). "Institutional policies supporting effective OER practices: A synthesis of findings from the Open University UK" In *Proceedings of the 4th OER Workshop*.
- Hilton III, J. (2016). "Open educational resources and college textbook choices: A review of research on efficacy and perceptions". *Educational Technology Research and Development*, 64(4), 573-590. <https://doi.org/10.1007/s11423-016-9434-9>
- Hilton III, J., Fischer, L., Wiley, D., & Williams, L. (2016). "Maintaining momentum toward graduation: OER and the course throughput rate" *International Review of Research in Open and Distributed Learning*, 17(6), 18-27.
- Hilton III, J., & Wiley, D. (2010). "A sustainable future for open educational resources?" *The Journal of Distance Education*, 24(2), 1-13. <https://doi.org/10.1080/01587919.2010.503062>
- Jhangiani, R., & Jhangiani, S. (2017). "Investigating the perceptions, use, and impact of open textbooks: A survey of post-secondary students in British Columbia." *The International Review of Research in Open and Distributed Learning*, 18(4). <https://doi.org/10.1007/s11423-017-9434-9>
- Li, Y., & Zhang, Y. (2019). "The influence of open educational resources on students' learning outcomes: A meta-analysis". *Educational Technology & Society*, 22(1), 1-13.
- Mulder, F. (2013). "Open educational resources: A catalyst for innovation, educational research and innovation". OECD Publishing. doi: 10.1787/9789264185363-en
- National Institute of Open Schooling. (2016). "Open educational resources. Retrieved from <https://www.nios.ac.in/media/documents/OER.pdf>"
- Rolfe, V. (2016). "Open educational resources: Staff attitudes and awareness", *Research in Learning Technology*, 24.
- Smith, M., & Casserly, C. (2006). "The promise of open educational resources. *Change: The Magazine of Higher Learning*" 38(5), 8-17. doi: 10.3200/CHNG.38.5.8-17
- Stagg, A. (2014) "A guide to developing digital literacies in new teachers: Models, frameworks and exemplars" *Australian Journal of Teacher Education*, 39(6), 146-163.
- Weller, M. (2014). "Battle for open: How openness won and why it doesn't feel like victory. London:" Ubiquity Press. doi: 10.5334/bam

Wiley, D., & Hilton III, J. (2018) "Defining OER-enabled pedagogy" *The International Review of Research in Open and Distributed Learning*, 19(4), 133-147.