Open Educational Resources: A Study of Awareness, Adoption and Impact on School Library Professionals

Dr. Rajesh Patel

Librarian, Bharatiya Vidya Bhavan's GIPCL Academy, Nani Naroli, Mangrol, Surat, Gujarat, India

rforraj@rediffmail.com

ABSTRACT

This study explores the awareness, adoption, and impact of Open Educational Resources (OER) among school library professionals in India. Through a structured questionnaire distributed to 136 librarians across various educational boards, the research investigates the level of awareness about OER, usage patterns, perceived benefits and challenges, and the impact on professional practices. The findings reveal that while a significant majority of respondents are aware of the term OER, a considerable portion lacks a comprehensive understanding of its usage and potential. The study highlights that OER is primarily used for teaching and learning, with open-access images being the most popular type of resource. Cost reduction and knowledge enhancement are identified as significant motivators for OER adoption. The research also emphasizes the need for targeted awareness campaigns, practical training programs, and strategies to address challenges associated with OER usage. By examining the experiences and perspectives of school library professionals, this study contributes to a deeper understanding of the role of OER in supporting education and informing strategies to promote its effective integration in school libraries.

KEYWORDS: Open Educational Resources (OER), School Librarians, Library Professional, OER awareness, OER Usage, Educational Materials.

INTRODUCTION

The advent of digital technologies has revolutionized the way of accessing, share and utilizing educational resources. Open Educational Resources (OER) have emerged as a significant development in this landscape, offering a vast array of educational materials that are freely available, accessible and adaptable. School library professionals play a crucial role in enhancing teaching and learning. Their awareness and adoption of OER can significantly elevate the quality of education. As curators of educational content, school librarians are well-positioned to promote the use of OER, facilitate access to these resources and guide their effective integration into the curriculum. The study examines the awareness, adoption and impact of OER among school library professionals, emphasizing the factors shaping their utilization, the perceived benefits and challenges, and the broader implications

for school libraries and education. By examining the experiences and perspectives of school library professionals, this research seeks to contribute to a deeper understanding of the role of OER in supporting teaching and learning.

LITERATURE REVIEW

Open Education Resources (OER) have gained significant attention in recent years as a means of increasing access to quality educational materials, reducing costs and promoting collaboration and sharing among educators. As a result, there is a growing body of research on OER. This literature review aims to synthesize the existing research on OER, with the focus on the awareness, adoption and impact of OER.

Felcy Dsouza (2021), as revealed in the study of "Awareness and use of Open Educational Resources: A study", found that majority of the educators were having limited awareness and experience in using of OER. Study has shown that awareness of OER is a critical factor in their adoption and use.

Kamleshkumar J. Patel (2024) examined the level of familiarity amongst research scholars, postgraduate students and undergraduate students at IIT Jodhpur regarding OER and observed that there is low to moderate awareness about OERs and concept of open licensing and copyright within scholars at all levels.

Arunkumar and Kannan (2020) have presented a brief overview in their study about "Awareness and use of Open Educational Resources" by PG students at Alagappa University. They explained that only 35% of students are well aware and frequently use the Open Educational Resources support in their routine studies and learning process.

The research by **Dr. M. Mahendraprabu** et al. explores the opportunities and challenges of integrating Open Educational Resources (OER) in India. It highlights OER's potential to enhance education quality and affordability through localized content and digital communities. The study identifies key hurdles like limited awareness, lacking open-license policies, and disorganized content. Ultimately, it stresses the need for collaborative initiatives to build a sustainable OER ecosystem in India.

OBJECTIVES OF THE STUDY:

- ✓ To assess the level of awareness among school library professionals about Open Education Resources (OER).
- ✓ To examine the adoption and usage patterns of OER among school library professionals.
- ✓ To investigate the impact of OER on the professional practices of school library professionals.
- ✓ To identify the benefits and challenges associated with the use of OER in school libraries.

These objectives seek to understand the advantages and disadvantages of using OER, as perceived by school library professionals and the strategies they employ to overcome challenges.

METHODOLOGY

This research will discover the awareness, adoption, and impact of Open Educational Resources (OER) on school library professionals in India. To conduct the study a structured questionnaire was distributed using Google Forms to school librarians across the country. The survey of questions focused on the following areas:

- ✓ What is the current level of awareness about OER?
- ✓ How do school library professionals use OER in their professional practices?
- ✓ What are the benefits and challenges associated with the use of OER?
- ✓ How do school library professionals promote OER to teachers and students?

The study was conducted online, and the collected data was stored digitally for analysis. Additional data was gathered through a limited number of telephonic conversations. Survey questions were developed in consultation with school librarians representing various educational boards in India. Microsoft Word and Excel were used for data analysis, interpretation, and the development of conclusions.

DATA COLLECTION AND ANALYSIS

A survey exploring awareness, adoption, and impact of Open Educational Resources (OER) among school library professionals utilized a Google Form containing both closed and open-ended questions. The questionnaire link was shared with around 400 school librarians across India via various platforms, including WhatsApp groups, Facebook, email, and direct communication. A total of 136 responses were collected from library professionals working in schools affiliated with various educational boards throughout India. All 136 responses were included in the subsequent analysis.

The distribution of respondents across different school affiliation boards is notable. The majority of responses (109 out of 136, or 80%) originated from CBSE schools. Respondents from ICSE/ISC boards represented 13% of the total (18 out of 136). Combined responses from various State Government boards, IB, and IGCSE/GSCE boards constituted less than 7% of the overall data set.

Figure 1. Awareness About the Term OER
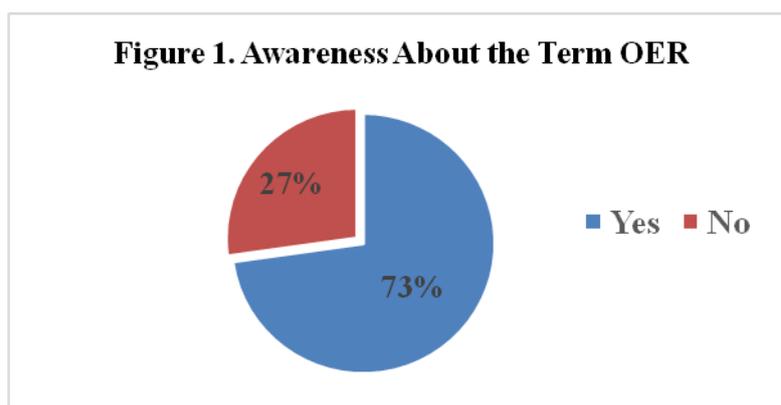
The above figure shows that a significant majority (73%) of the respondents are aware of the term "OER" (Open Educational Resources). However, a notable minority (27%) are still unaware of the term. The high percentage of awareness suggests that efforts to promote and educate people about OER have been somewhat successful. While the majority is aware, the 27% unaware group represents a substantial portion that needs to be targeted in future awareness campaigns.
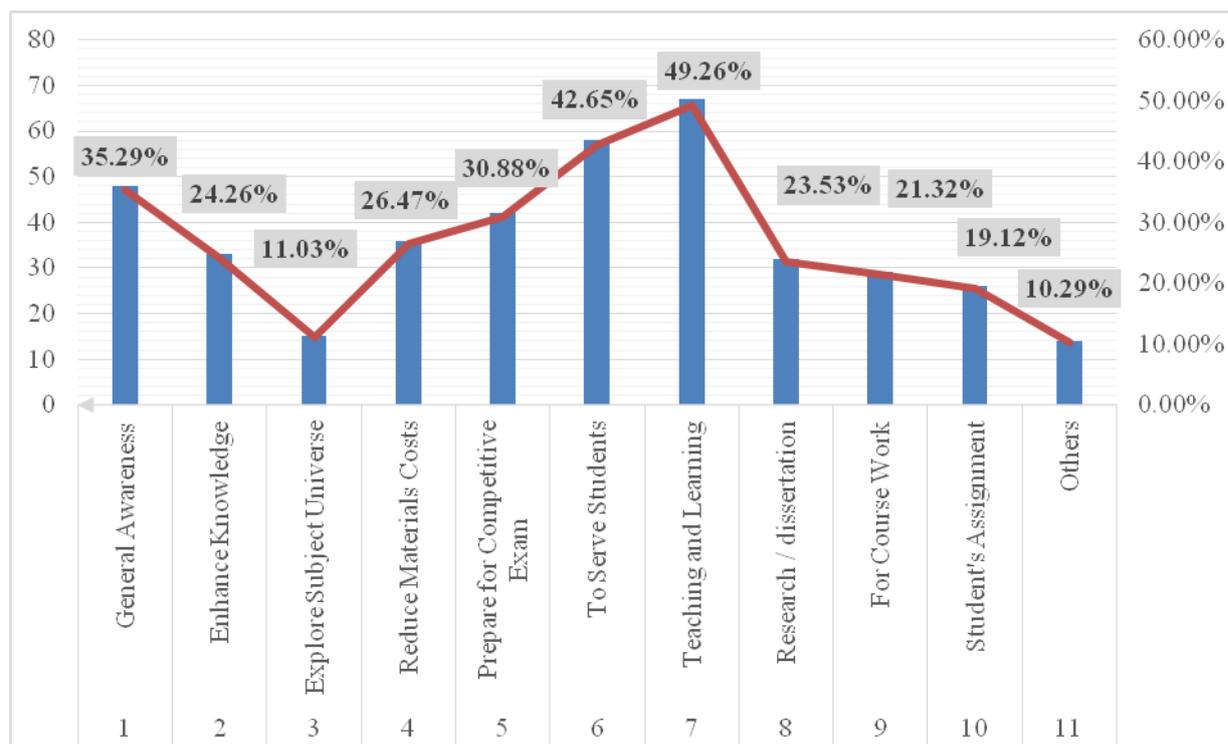
Table 1. Level of Awareness about Open Educational Resources

SN	Particular	SA		A		N		D		SD		Total	
1	I am not aware of OER	37	27.21%	35	25.74%	20	14.71%	15	11.03%	29	21.32%	136	100.00%
2	I have heard of OER, but don't know much	17	12.50%	22	16.18%	25	18.38%	34	25.00%	38	27.94%	136	100.00%
3	I am aware somewhat but, not sure how they can be used	32	23.53%	28	20.59%	18	13.24%	19	13.97%	39	28.68%	136	100.00%
4	I am aware and use them occasionally	42	30.88%	37	27.21%	28	20.59%	16	11.76%	13	9.56%	136	100.00%
5	I am well aware and use them requently	36	26.47%	33	24.26%	17	12.50%	14	10.29%	36	26.47%	136	100.00%

*Note: - SA - Strongly Agree, A - Agree, N - Neutral, D - Disagree, SD - Strongly Disagree*

The above table shows that over a quarter of respondents (27.21%) are completely unaware of OER. This highlights a substantial gap in basic knowledge and indicates a need for foundational awareness campaigns. A combined 35.88% (12.50% + 23.53%) have some level of awareness (heard of it or somewhat aware) but lack sufficient understanding to use OER effectively. A promising 57.35% (30.88% + 26.47%) of respondents are aware of OER and engage with it, with 26.47% being frequent users. This suggests that once individuals understand OER, they are likely to use it. The large segments of unaware and partially aware individuals represent a significant opportunity to expand OER usage. By addressing the knowledge gaps and providing practical guidance, the number of active users could be substantially increased.

**Figure 2.** Purposes for Using Open Educational Resources

Figure 2. presents the purposes for using Open Educational Resources (OER), revealing that "Teaching and Learning" is the most cited reason at 49.26%. This highlights OER's primary role in instructional practices. Following this, 42.65% utilize OER "To Serve Students," indicating a strong focus on student's benefit. "General Awareness" and "Enhance Knowledge" also register significant usage, at 35.29% and 24.26% respectively, suggesting OER's value in personal development. Interestingly, "Reduce Materials Costs" is a motive for 26.47% of users, showcasing OER's potential for affordability. Purposes like "Research/Dissertation," "Course Work," and "Student's Assignment" point to OER's integration within academic processes. Lower percentages for "Explore Subject Universe," "Prepare for Competitive," and "Others" suggest these are less dominant drivers for OER use. Overall, the data emphasizes OER's importance in teaching, learning, and student support, with cost reduction and knowledge enhancement as significant secondary motivators.

Figure 3. Types of Open Educational Resources Used
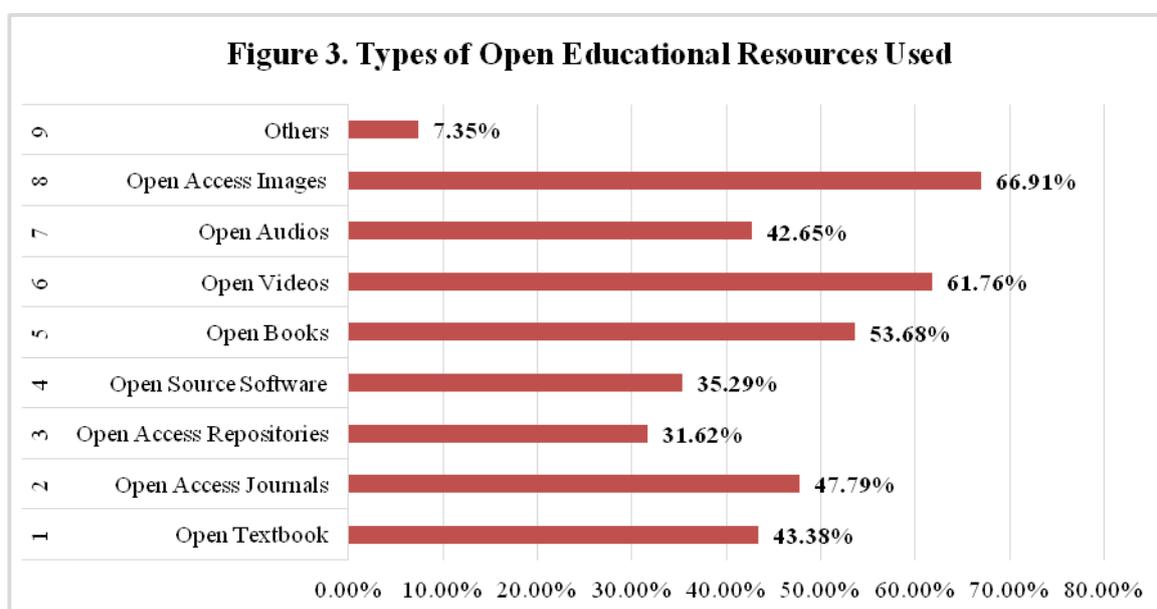
The above chart illustrates the types of Open Educational Resources (OER) utilized, revealing "Open Access Images" as the most popular at 66.91%. This suggests a high demand for visual resources in educational materials. "Open Videos" also show strong usage at 61.76%, highlighting the growing importance of multimedia in learning. "Open Books" are utilized by 53.68% of respondents, indicating the continued relevance of traditional text formats. "Open Access Journals" features prominently at 47.79%, showcasing their significance in research and academic contexts. "Open Textbook" usage is reported by 43.38%, while "Open Audios" stand at 42.65%, demonstrating the adoption of diverse formats. "Open-Source Software" and "Open Access Repositories" register lower usage at 35.29% and 31.62% respectively, possibly due to specialized applications. "Others" constitute a small fraction at 7.35%. This data highlights a preference for visual and multimedia resources, alongside traditional text-based formats, in the OER landscape.

Figure 4. Use of OERs Platforms
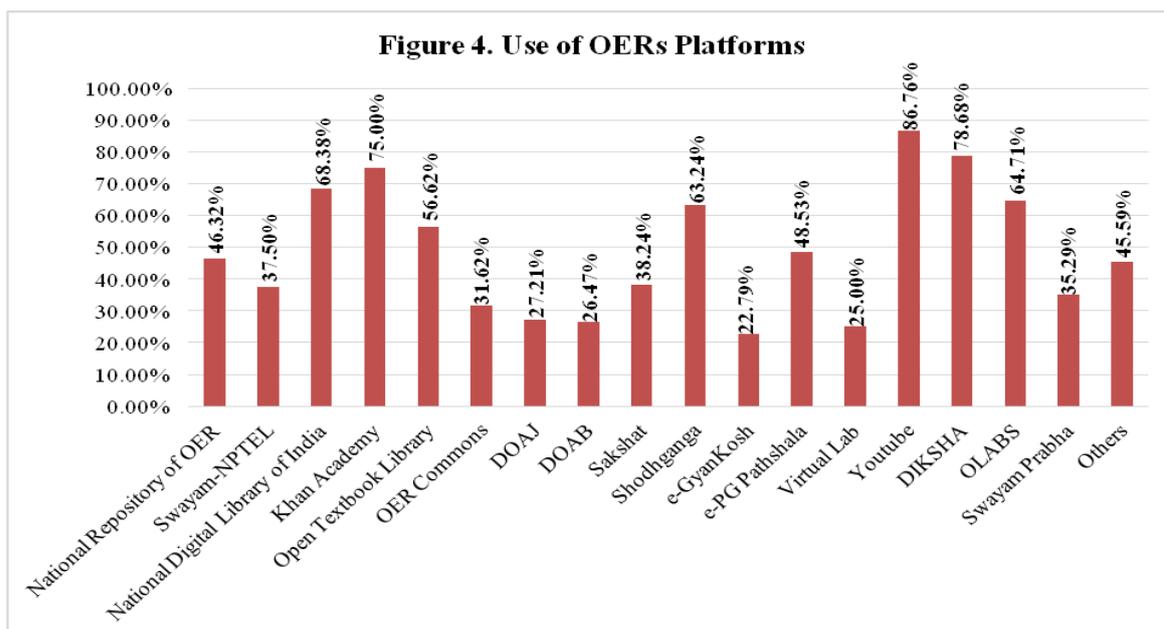
This graph presents data on the usage of various OER platforms, revealing a wide range of adoption rates. "DIKSHA" exhibits the highest usage at 86.76%, suggesting its dominance in the Indian OER landscape, potentially due to governmental backing and curriculum integration. "YouTube" follows with 78.68%, highlighting its widespread use for educational content delivery. "Khan Academy" and "Swayam-NPTEL" also demonstrate significant usage at 75% and 68.38% respectively, indicating their popularity among learners. Platforms like "National Digital Library of India" and "e-GyanKosh" show moderate usage, while others like "DOAJ," "DOAB," and "Sakshat" have considerably lower adoption rates. This disparity likely reflects differences in content relevance, user interface, accessibility, and awareness. The data underscores the need for platform improvement and targeted promotion to broaden OER access and utilization. Further research could explore the specific factors driving platform choice and identify areas for development to enhance user engagement.

SN	Particular	SA		A		N		D		SD		Total	
							Table 2. Impact of Open Educational Resources						
1	Reduced cost of learning and research materials	44	32.35%	72	52.94%	15	11.03%	5	3.68%	0	0.00%	136	100.00%
2	Greater range of learning materials	36	26.47%	67	49.26%	18	13.24%	11	8.09%	4	2.94%	136	100.00%
3	Materials can be used flexibly	37	27.21%	70	51.47%	17	12.50%	9	6.62%	3	2.21%	136	100.00%
4	Materials can be accessed at any time	33	24.26%	63	46.32%	25	18.38%	12	8.82%	3	2.21%	136	100.00%
5	Materials can be adapted to suit our needs	35	25.74%	58	42.65%	27	19.85%	15	11.03%	1	0.74%	136	100.00%
6	Use of resources for improving study skills	27	19.85%	65	47.79%	22	16.18%	21	15.44%	1	0.74%	136	100.00%
7	Materials are available in different languages	29	21.32%	68	50.00%	18	13.24%	18	13.24%	3	2.21%	136	100.00%
8	OER's sharpen and enhance my knowledge	34	25.00%	71	52.21%	12	8.82%	11	8.09%	8	5.88%	136	100.00%
9	It helps me to increase library services	30	22.06%	56	41.18%	26	19.12%	14	10.29%	10	7.35%	136	100.00%
10	It supports in teaching and learning	24	17.65%	58	42.65%	32	23.53%	18	13.24%	4	2.94%	136	100.00%
11	Provide supports in student's assignments	26	19.12%	65	47.79%	36	26.47%	8	5.88%	1	0.74%	136	100.00%
12	It helps in competitive exams	22	16.18%	59	43.38%	33	24.26%	17	12.50%	5	3.68%	136	100.00%
13	Can be developed new skills	19	13.97%	61	44.85%	38	27.94%	12	8.82%	6	4.41%	136	100.00%

Note:- SA - Strongly Agree, A - Agree, N - Neutral, D - Disagree, SD - Strongly Disagree

Above table 2. presents survey data on the perceived impact of Open Educational Resources (OER). High Agreement on Core Benefits**:** A significant portion of respondents either "Strongly Agreed" or "Agreed" with the positive impacts of OER, especially regarding…

- Reduced cost of learning and research materials, 85.29% agreement (SA + A). This is a major driver for OER adoption.

- Greater range of learning materials, 75.73% agreement. OER provides access to a wider variety of resources.

- Materials can be used flexibly**,** 78.68% agreement. Flexibility in how materials are used is a key advantage.

- Materials can be accessed at any time**,** 70.58% agreement. Accessibility and convenience are highlighted.

- Positive Perception of Adaptability and Relevance**,** A good number of respondents felt that OER can be adapted to suit their needs (SN 5, 68.39% agreement). While the agreement is slightly lower, it's still a positive indicator.

- Neutrality and Disagreement on Specific Aspects, there are some areas where we see higher levels of "Neutral," "Disagree," or "Strongly Disagree" responses:

- Use of resources for improving study skills, has the lowest agreement rate, suggesting that respondents may not directly associate OER with study skills improvement. A percentage relatively high "Disagree" and "Strongly Disagree" responses (16.18% + 15.44% + 0.74% = 32.36%) indicates some disbelief about this connection.

- Materials are accessible in multiple languages, a majority agrees (71.32%), and the "Neutral" responses are significant.

- OER's sharpen and enhance my knowledge**:** there is a high agreement (77.21%), but the combined "Disagree" and "Strongly Disagree" responses are notable (14.01%), suggesting that some users may not find OER as effective for knowledge enhancement.

- Library Services, Support Teaching & Learning and Student's Assignments: a majority agrees, but there's a significant "Neutral" vote and a noticeable "Disagree/Strongly Disagree". This might indicate uncertainty about how OER integrates with library services or a perception that it might even compete with them.

FINDINGS AND SUGGESTIONS

- ❖ A significant majority (73%) of respondents are aware of the term OER, indicating a good level of general awareness. Efforts should focus on educating the remaining 27% about OER's benefits and accessibility to broaden understanding.

- ❖ A significant portion of respondents are not well aware of OER, so targeted awareness campaigns should be implemented to educate individuals about OER, its benefits (cost savings, accessibility), and its availability. Utilize various channels such as social media, workshops, and institutional websites to reach a wider audience and address the knowledge gap.

- ❖ We should develop and offer practical training programs and resources that demonstrate how to effectively integrate OER into teaching practices and learning workflows.

- ❖ "General Awareness" and "Reduce Materials Costs" show the highest percentage responses, indicating that these are strong drivers for OER interest and use. Highlight success stories and data related to cost savings that can be achieved through OER.

❖ Explore "Subject Universe" and "Prepare for Competitive Exam" have the lowest percentage responses, suggesting that these are less influential motivators for OER engagement. If the issue is lack of awareness of existing resources, targeted promotion is needed.

❖ "Open Access Images" is the most frequently used type of OER, with a substantial 66.91% usage rate, significantly higher than any other category.

❖ "Open Access Repositories" and "Open-Source Software" show the lowest usage rates among the listed OER types, at 31.62% and 35.29% respectively. Investigate the reasons for the lower adoption of said resources.

❖ "Khan Academy" and "YouTube" show the highest usage rates among the listed OER platforms indicating strong adoption and familiarity with them. Leverage the popularity of Khan Academy and YouTube by creating curated playlists or channels of high-quality OER content relevant to specific subjects or educational levels.

❖ "DOAJ" (Directory of Open Access Journals) and "DOAB" (Directory of Open Access Books) show relatively low usage rates despite being valuable resources for academic materials. Implement strategies to increase awareness and usage of DOAJ and DOAB among students and educators. This could include workshops, tutorials, and integrating these directories into library resources or learning management systems.

❖ Emphasize the cost-saving benefits of OER in promotional campaigns and outreach efforts. Develop resources and tools to help educators easily find and adopt cost-effective OER alternatives to traditional textbooks and materials.

❖ It is essential to investigate the reasons behind the lower perceived impact of OER on knowledge enhancement. Develop strategies to showcase high-quality OER materials and provide guidance on effective integration to maximize knowledge gains.

CONCLUSION

Open Educational Resources (OER) have emerged as a powerful tool to democratize education, offering cost-effective, adaptable, and accessible learning materials. This study explored the awareness, adoption, and impact of OER among school library professionals in India. The findings reveal a high level of OER awareness, particularly regarding its cost-saving potential and accessibility. However, challenges remain in terms of awareness, effective usage, and integration with library services. To fully realize the transformative potential of OER, targeted interventions are needed to bridge knowledge gaps, enhance usage skills, and address concerns regarding quality and adaptability. By empowering school library professionals with the knowledge and resources to effectively utilize and promote OER, we can unlock new opportunities for teaching, learning, and research, ultimately fostering a more inclusive and enriching educational landscape.

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