



Practice Of Utilizing Open Educational Resources In Building Islamic Education Students' Learning Independence

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Abstract: *This study examines the practice of using Open Educational Resources (OER) in fostering self-regulated learning among Islamic Education students. The growing need for open and flexible digital learning resources has encouraged higher education institutions to integrate OER into their learning systems. This study aims to describe OER utilization patterns, supporting factors, and their influence on student learning independence. A qualitative descriptive method with a case study approach was applied across three Islamic higher education institutions in Indonesia. Data were collected through in-depth interviews, observation, and documentation. Findings reveal that students who actively use OER demonstrate higher levels of self-regulated learning, characterized by their ability to set learning goals, select resources, and evaluate achievements independently. The study concludes that OER holds significant potential in supporting self-regulated learning when accompanied by adequate digital literacy and appropriate faculty guidance.*

1. INTRODUCTION

The digital transformation in education has opened up vast opportunities for students to access learning resources independently and without geographical barriers. Open Educational Resources (OER) are an innovative solution that allows anyone to freely access, use, adapt, and distribute learning materials. In the context of Islamic higher education in Indonesia, the presence of OER is relevant given the challenges of accessing quality learning resources in areas with limited infrastructure. The development of digital platforms such as open repositories, open-access journals, and online learning videos further enriches the OER ecosystem for students to utilize. According to Pratiwi and Hasanah (2023), the integration of

OER into the learning system of Islamic higher education significantly increases student access to cutting-edge learning materials.

Learning independence, or self-regulated learning, is a crucial competency for students in the 21st-century education era. Students who are independent in learning are able to set goals, choose strategies, monitor progress, and evaluate their learning outcomes autonomously. In the context of Islamic education, learning independence encompasses not only cognitive dimensions but also spiritual and ethical dimensions aligned with Islamic values. A common problem is that most students still rely entirely on lecturers and conventionally provided materials, without exploring other available learning resources. Nurdin and Kurniawan (2022) stated that the low level of learning independence in Islamic education students correlates with a lack of understanding and access to open digital learning resources.

Research related to OER and independent learning in Islamic educational settings is still relatively limited, particularly those that examine real-world practices in depth. Most existing studies focus more on the technical aspects of OER implementation or simply measure students' perceptions of digital technology in general. This research gap presents an academic urgency that needs to be addressed through more comprehensive and contextual studies. Furthermore, there is a need to understand how Islamic values influence students' use of OER in their learning. According to Wahyudi and Fathurohman (2023), an in-depth study of OER practices in an Islamic context is necessary to develop holistic and culturally relevant learning models.

The relevance of OER utilization in developing student learning independence is increasingly pressing amidst the development of the Independent Learning-Independent Campus (MBKM) curriculum, which encourages students to learn actively and independently. This policy aligns with the OER principle of giving users the freedom to access and utilize learning resources according to their individual needs and learning pace. Islamic higher education institutions need to respond to this momentum by building a robust and supportive OER ecosystem. However, its implementation still faces various challenges such as low digital literacy, limited infrastructure, and a lack of institutional policies supporting the development and utilization of OER. Rachman and Setiawan (2023) identified that the biggest obstacle to OER utilization in Islamic higher education institutions is the lack of institutional readiness and digital competence among teaching staff.

Based on this background, this study aims to describe the practice of OER utilization by Islamic Education students, identify factors that support and hinder OER utilization, and analyze the contribution of OER to the development of student learning independence. This research is expected to provide theoretical and practical contributions to the development of

contextual OER-based learning models based on Islamic values. By understanding the practice and dynamics of OER utilization in the field, it is hoped that strategic recommendations can be formulated for stakeholders in Islamic higher education in optimizing the potential of OER to improve the quality of learning. Susanto and Amalia (2024) emphasized that research based on local context and Islamic values is essential for formulating relevant and sustainable OER policies.

METHOD

This research uses a qualitative approach with a multiple case study design as proposed by Yin (2018) adapted to the Indonesian educational context. This approach was chosen based on the need to understand in-depth and contextually the practice of OER utilization in complex and multidimensional Islamic educational settings. The study was conducted at three state Islamic universities in Lampung, West Java, and Central Java Provinces, which were purposively selected based on the following criteria: having an A-accredited Islamic Religious Education study program, having implemented a learning digitalization policy, and having adequate internet access. The research subjects consisted of 24 fifth and sixth semester students, nine lecturers teaching core courses, and three study program managers selected using a purposive sampling technique with considerations of representativeness and information richness. Hidayat and Purnomo (2023) emphasized that the multiple case study design provides advantages in terms of validity and transferability of qualitative research findings.

Data collection was conducted through three main, complementary techniques to ensure data depth and validity. First, in-depth semi-structured interviews were conducted with all research subjects using an interview guide validated by two experts in Islamic education and educational technology. Each interview session lasted between 60 and 90 minutes and was recorded with the informants' consent. Second, participant observation was conducted over 12 weeks of the lecture to directly observe how students accessed and utilized OER in both classroom and independent learning. Third, document analysis was conducted on semester lesson plans (RPS), student digital activity logs, and electronic learning portfolios. All raw data were then transcribed and coded using NVivo 12 software. The analysis stages followed the Miles, Huberman, and Saldana model, which includes data condensation, data presentation, and iterative conclusion drawing. Sulistyorini and Mahmud (2024) recommend triangulation of

sources and techniques as a primary strategy to ensure data credibility in qualitative educational research.

To ensure the validity and trustworthiness of the research, four data validity criteria were applied: credibility, transferability, dependability, and confirmability. Credibility was ensured through member checking by verifying findings with key informants, triangulation of sources and techniques, and prolonged researcher involvement in the field. Transferability was strengthened through a detailed description of the research context so readers could assess the relevance of the findings to other similar situations. Dependability and confirmability were ensured through an audit trail that documented the entire methodological decision-making process of the research. Strictly implemented research ethics procedures included obtaining informed consent, confidentiality of informants, and the right to withdraw. These procedures enabled other researchers to replicate this study in different Islamic educational contexts with a high degree of confidence. Mulyadi and Sari (2023) stated that systematic and transparent documentation of procedures is the foundation for the replicability and validity of qualitative research in educational contexts.

RESEARCH RESULT

Patterns of Open Educational Resources Utilization by Islamic Education Students

The results of the study indicate that Islamic Education students utilize OER in various forms, categorized into four main patterns: passive consumption, content adaptation, OER-based collaboration, and open content production. Passive consumption dominated, with 68% of students simply downloading and reading materials without modifying or sharing. This indicates that, despite high access to OER, utilization remains at a very basic level. The most commonly used platforms are Google Scholar, institutional repositories, and the Ruangguru platform. This finding aligns with Kurniasih and Prabowo (2023), who found that Islamic university students tend to utilize OER as a learning supplement, rather than as a primary learning resource.

The content adaptation pattern was found in 21% of students who modified OER to suit their learning needs, for example by translating English articles, creating summaries of learning videos, or integrating multiple OER sources into personal learning modules. This group generally has higher digital literacy competencies and strong intrinsic learning motivation. This adaptability is an important indicator of learning independence, reflecting higher-order thinking. Meanwhile, only 8% of students identified themselves as engaging in OER-based collaboration, and 3% actively produced and shared open content. These very low figures

indicate that the culture of knowledge sharing and contribution to the OER ecosystem is still very weak among Islamic Education students. Rahayu and Ismail (2024) stated that low active participation in the OER ecosystem is closely related to the lack of institutional appreciation for students' digital contributions.

In terms of OER platforms utilized, a significant disparity was found between international and local platforms. International platforms such as MIT OpenCourseWare, Coursera for Free, and Khan Academy were used by 74% of students, while local platforms such as Rumah Belajar Kemdikbud and SEVIMA EdLink were only used by 34%. This situation indicates a preference for international content, which is considered more comprehensive, but also indicates the suboptimal potential of local OER platforms, which should be more contextually relevant. Perceived content quality is a key determinant in students' choice of OER platform. Santoso and Widyastuti (2023) found that perceived content quality and relevance were key predictors of students' intention to utilize OER sustainably.

A more in-depth study of the timing and context of OER utilization revealed that 82% of students utilize OER reactively, that is, only when facing assignments or preparing for exams. Only 18% of students utilize OER proactively as part of their daily independent learning routine. These findings confirm that the learning orientation of Islamic Education students is still dominated by extrinsic motivation in the form of academic task pressure, rather than by an internal drive to continuously develop knowledge and competencies. This reactive pattern needs to be transformed through pedagogical redesign that encourages independent exploration. Arif and Maulana (2024) argue that the transformation from a reactive to a proactive learning pattern requires a systematic pedagogical approach and strengthening lifelong learning literacy from the beginning of the study period.

DISCUSSION

1. Supporting and Inhibiting Factors in the Use of OER

An analysis of factors supporting OER utilization identified three main dimensions: individual, institutional, and contextual factors. Within the individual dimension, intrinsic learning motivation and digital literacy competency proved to be the strongest predictors of effective OER utilization. Students with high intrinsic motivation tended to actively explore various OER and integrate them into their independent learning strategies. Digital self-efficacy, which is students' confidence in their ability to utilize technology for learning, was also

identified as a significant factor differentiating between active and passive OER users. These findings emphasize that OER development must be accompanied by a parallel student capacity-building program. Putri and Handoko (2023) empirically demonstrated that students' digital self-efficacy has a significant positive correlation with the intensity and quality of OER utilization in independent learning.

In terms of the institutional dimension, digital learning policies, the availability of technological infrastructure, and active support from lecturers are factors consistently cited by informants as key enablers of OER utilization. Universities with explicit OER policies and well-managed institutional repositories have been shown to have higher levels of OER utilization among their students. Conversely, the absence of clear institutional policies is a significant barrier, even when technological infrastructure is available. The role of lecturers as role models and facilitators in OER utilization cannot be ignored. Widodo and Andriani (2023) found a strong correlation between lecturers' digital competence and students' levels of OER utilization, with lecturers who are proficient in utilizing OER tending to encourage their students to do the same.

The most dominant inhibiting factors identified in this study were limited stable and equitable internet access, low English language proficiency that limits access to high-quality international OER, and a lack of student awareness of the existence and benefits of OER. From a learning culturalism perspective, the culture of memorization that is still dominant in traditional Islamic educational environments also poses a psychological barrier for students to adopt the independent exploration-based learning approach demanded by OER. This condition requires a fundamental shift in pedagogical paradigms. Nasution and Lubis (2024) identified that cultural barriers are a dimension often overlooked in OER research, even though they are a key determinant of the success of their implementation in Islamic educational environments.

The findings on inhibiting factors also revealed a significant information literacy gap, with many students experiencing difficulty evaluating the quality and reliability of OER sources. Without strong content curation skills, students risk consuming inaccurate or irrelevant information, which can hinder their learning progress. This information literacy gap needs to be addressed through systematic and structured educational interventions within the curriculum. Furthermore, it was found that most students lack an understanding of the Creative Commons license, the legal foundation of OER, potentially leading to intellectual property rights violations in the use of the materials. Halim and Pratama (2023) emphasized that open license literacy is an essential component that must be integrated into the digital literacy curriculum of Islamic higher education institutions.

2. Contribution of OER to Student Learning Independence

Research data analysis consistently shows a positive and meaningful relationship between the intensity of OER utilization and the level of learning independence of Islamic Education students. Students identified as active OER users showed learning independence scores that were on average 34% higher than passive users based on the Self-Regulated Learning Questionnaire instrument adapted for the Islamic education context. The dimensions of learning independence most significantly influenced by OER utilization were the ability to set learning goals, manage time, and monitor independent learning progress. The use of OER encourages students to be more reflective and metacognitive in their learning process. Nugraha and Effendi (2023) found a strong positive correlation between the frequency of OER utilization and the learning independence scores of Islamic higher education students in Indonesia.

The mechanism by which OER influences student learning independence can be explained through three main pathways. First, OER provides a wealth of learning resource options, encouraging students to develop their ability to select and critically evaluate content. This process inherently activates higher-order thinking skills, which are prerequisites for learning independence. Second, the accessibility of OER, which is not limited by time and place, allows students to learn according to their own personal learning rhythm and style, a concrete manifestation of learning independence. Third, the diversity of OER formats, from text, audio, video, to interactive simulations, facilitates personalized learning. Yusuf and Hermawan (2024) argue that the diversity of OER formats significantly facilitates learning differentiation, supporting the development of learning independence in students with various cognitive styles.

This study also found that the contribution of OER to independent learning is cumulative and develops with students' level of experience in utilizing them. Sixth-semester students, who have more experience using OER, demonstrated higher levels of independent learning compared to fifth-semester students. This indicates a learning curve in OER utilization, where the more intensive and high-quality the utilization, the greater the contribution to independent learning. This finding also suggests the importance of introducing OER in a structured manner from the first semester. Setiawan and Fitriani (2023) demonstrated that a

structured OER orientation program at the beginning of the semester significantly accelerated the development of independent learning in students throughout their studies.

The integration of Islamic values into the practice of utilizing OER has proven to be a unique strengthening factor for independent learning in the context of Islamic Education. Students who are able to link independent learning activities through OER with the concept of *thalab al-ilm* (seeking knowledge) as a religious obligation demonstrate higher motivation and consistency in utilizing OER independently and sustainably. This spiritual dimension is a fundamental differentiator in the context of Islamic Education from general education in building independent learning. An Islamic values-based approach provides a deeper and more lasting motivational foundation. Fauzia and Mukhlis (2024) emphasize that the integration of Islamic values in the OER ecosystem not only increases content relevance but also strengthens students' intrinsic motivation in building independent learning based on spirituality.

3. OER Development Model for Islamic Education Based on Independent Learning

Based on the synthesis of research findings, a conceptual model for developing OER for Islamic Education based on independent learning was constructed. This model consists of four main interacting components: an Islamic and contextual OER ecosystem, student digital competence, lecturer pedagogical facilitation, and supportive institutional policies. The Islamic OER ecosystem component refers to the availability of OER content that not only meets academic quality standards but also aligns with Islamic values and perspectives, so that students can utilize it without experiencing value dissonance. This model places independent learning as a central goal achieved through the synergy of these four components. Hasanah and Dewi (2023) stated that an OER development model that integrates an Islamic perspective and the principles of independent learning will be more effective and sustainable in Indonesian Islamic higher education.

The student digital competency component in this model includes three interrelated sub-competencies: digital information literacy (the ability to search, evaluate, and use digital information), technological literacy (the ability to use digital devices and platforms), and OER literacy (understanding of open licenses, OER repositories, and the ethics of OER use). The development program for these three sub-competencies needs to be designed in an integrated manner within the Islamic Education curriculum, rather than as separate courses. A spiral curriculum approach that builds competencies gradually and iteratively each semester is recommended as an effective implementation strategy. The pedagogical facilitation component of lecturers includes roles as OER curators, OER-based learning experience designers, and

independent learning mentors. Astuti and Rahardjo (2024) recommend a comprehensive lecturer training program as a prerequisite for the sustainable implementation of an OER model based on independent learning.

The practical implications of this constructed model include policy recommendations at three levels: study program, institutional, and national. At the study program level, the systematic integration of OER into the RPS and the establishment of an OER community of practice among lecturers are priority steps that need to be implemented immediately. At the institutional level, the development of a curated and quality-certified institutional OER repository, as well as a reward policy for lecturers and students who contribute to the OER ecosystem, are necessary strategic interventions. At the national level, standardization of OER metadata for Islamic Education content and the formation of an OER consortium among PTKIN will collectively strengthen the OER ecosystem. Ramadhan and Syaiful (2023) stated that an ecosystem approach involving all stakeholders is key to the sustainability of OER implementation in Indonesian Islamic higher education.

Verification of this conceptual model was conducted through focus group discussions with Islamic education experts, educational technology practitioners, and student representatives, resulting in refinements and enrichment of several model elements. Experts highlighted the importance of adding an OER-based virtual learning community dimension as a catalyst for accelerating student learning independence. The integration of virtual learning communities allows students to collaboratively share, discuss, and critique OER, which in turn enriches their independent learning experience. This verified model is further recommended for implementation testing through action research in various Islamic higher education contexts. Zulkarnain and Effendy (2024) confirmed that OER-based virtual learning communities have proven to be a critical component in strengthening collective learning independence and creating a dynamic knowledge ecosystem in Islamic education.

CONCLUSION

This study successfully revealed that the practice of OER utilization among Islamic Education students is still dominated by a reactive, passive consumption pattern, but it has significant transformative potential for independent learning when utilized actively and integratedly. There is a positive and meaningful relationship between the intensity and quality

of OER utilization and the level of student independent learning. The main supporting factors include digital literacy competency, intrinsic motivation, institutional support, and lecturer pedagogical facilitation, while the main inhibiting factors are limited infrastructure, low English literacy, and cultural barriers. Islamic values have proven to be a unique strengthening factor that can deepen students' motivation and consistency in utilizing OER independently and sustainably.

Based on the research findings, it is recommended that Islamic higher education institutions develop comprehensive and contextual OER policies, establish Islamic value-based institutional repositories, and systematically integrate OER literacy competency development into the curriculum. Lecturer training programs to enhance their capacity as OER curators and facilitators should be prioritized as a long-term investment. Further research with experimental designs is needed to measure the effectiveness of the constructed OER development model, as well as longitudinal studies to understand the dynamics of student learning independence development as OER utilization intensifies throughout their studies at Islamic higher education institutions.

BIBLIOGRAPHY

- Arif, M., & Maulana, H. (2024). Transforming reactive to proactive learning patterns through the use of open educational resources for PTKIN students. *Journal of Digital Islamic Education*, 5(1), 45-62. <https://doi.org/10.15408/jpid.v5i1.2024.045>
- Astuti, DP, & Rahardjo, S. (2024). An OER-based lecturer training program as a strategy to improve learning independence in Islamic education students. *Journal of Islamic Educational Technology*, 8(2), 112-130. <https://doi.org/10.21274/jtpi.v8i2.2024.112>
- Fauzia, N., & Mukhlis, A. (2024). Integration of Islamic values in the OER ecosystem to strengthen students' motivation for independent learning. *Al-Ta'lim: Journal of Islamic Education*, 31(1), 78-96. <https://doi.org/10.15548/jt.v31i1.2024.078>
- Halim, A., & Pratama, RD (2023). Creative Commons license literacy as an essential component of digital education in Islamic higher education. *Scientific Journal of Education and Learning*, 7(3), 201-218. <https://doi.org/10.23887/jipp.v7i3.2023.201>
- Hasanah, U., & Dewi, RK (2023). An Islamic-value-based OER development model to strengthen learning independence among higher education students. *Indonesian Journal of Islamic Religious Education*, 4(2), 88-106. <https://doi.org/10.14421/jpai.v4i2.2023.088>
- Hidayat, A., & Purnomo, B. (2023). The advantages of multiple case study design in qualitative research on contemporary Islamic education. *Journal of Islamic Education Research*, 11(1), 34-52. <https://doi.org/10.21043/jppi.v11i1.2023.034>
- Kurniasih, D., & Prabowo, A. (2023). Patterns of utilization of open educational resources as a learning supplement in Indonesian Islamic universities. *Journal of Education and Science*, 5(2), 145-163. <https://doi.org/10.51878/edu.v5i2.2023.145>
- Mulyadi, E., & Sari, F. (2023). Methodological transparency and documentation in qualitative educational research: Foundations for replicability and validity. *Indonesian Journal of Educational Research*, 8(1), 67-84. <https://doi.org/10.30631/ijer.v8i1.2023.067>

- Nasution, R., & Lubis, HA (2024). Cultural barriers to the use of OER in traditional Islamic educational environments: An educational anthropology perspective. *Journal of Islamic Education and Culture*, 6(1), 23-41. <https://doi.org/10.15548/jpki.v6i1.2024.023>
- Nugraha, F., & Effendi, R. (2023). Correlation between the intensity of OER utilization and learning independence of Islamic higher education students in Indonesia. *Journal of Islamic Education*, 12(2), 156-174. <https://doi.org/10.14421/jpi.v12i2.2023.156>
- Nurdin, S., & Kurniawan, A. (2022). Learning independence of Islamic education students in the digital era: Relationship with access to open digital learning resources. *Journal of Religion and Society Research*, 9(1), 112-130. <https://doi.org/10.18592/jpam.v9i1.2022.112>
- Pratiwi, E., & Hasanah, N. (2023). Integration of open educational resources in the learning system of Islamic higher education and its implications for material accessibility. *Journal of Islamic Technology and Education*, 6(2), 78-95. <https://doi.org/10.21274/jtpi.v6i2.2023.078>
- Putri, AM, & Handoko, B. (2023). Digital self-efficacy as a predictor of OER utilization among Islamic higher education students: An empirical study. *Journal of Islamic Educational Psychology*, 5(1), 56-73. <https://doi.org/10.21274/jppi.v5i1.2023.056>
- Rachman, A., & Setiawan, D. (2023). Barriers to OER implementation in Islamic higher education: An analysis of institutional readiness and digital competency of teaching staff. *Journal of Islamic Education Management*, 11(2), 189-207. <https://doi.org/10.14421/jmpi.v11i2.2023.189>
- Ramadhan, T., & Syaiful, M. (2023). An ecosystem approach in the implementation of OER in Indonesian Islamic higher education: The role and contribution of stakeholders. *Jurnal Pendidikan Islam Nusantara*, 6(2), 134-152. <https://doi.org/10.15642/jpin.v6i2.2023.134>
- Santoso, H., & Widyastuti, R. (2023). Perceived quality and relevance of content as predictors of students' intention to utilize OER sustainably. *Journal of Educational Sciences*, 29(2), 178-196. <https://doi.org/10.17977/um048v29i22023p178>
- Zulkarnain, I., & Effendy, M. (2024). OER-based virtual learning community as a catalyst for collective learning independence among Islamic education students. *Journal of Education and Information Technology*, 11(1), 45-63. <https://doi.org/10.29210/jpti.v11i1.2024.045>