

Development of Multilingual-Based LMS to Improve the Accessibility of Islamic Religious Education Learning Resources for Diaspora Residents in Japan

Widyasari¹, Nesia Andriana², Abas Mansur Tamam³, Rudi Hartono⁴, Endang Sri Rejeki⁵, Andi Hudiah⁶

- ^{1,4,5} Educational Technology, Ibn Khaldun University Bogor, Indonesia
- ^{2, 3} Islamic Religious Education, Ibn Khaldun University Bogor, Indonesia
- ⁶ Universitas Negeri Makassar, Indonesia

KEYWORDS

ABSTRACT

LMS Development, Learning Resource, Diaspora, Islamic Religious Education This research aims to develop a multilingual-based Learning Management System (LMS) to increase the accessibility of Islamic Religious Education (PAI) learning resources for Indonesian diaspora residents in Japan. Limited access to PAI materials and language barriers are the main challenges for the diaspora in maintaining religious education in foreign countries. Therefore, the development of this LMS is expected to provide practical solutions through the provision of an accessible and user-friendly platform, which can be operated in multiple languages, including Indonesian, English, and Japanese.

The research method used is a development research (R&D) method with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model. At the analysis stage, a survey of user needs related to PAI learning resources and the language challenges faced was carried out. At the design stage, the LMS is designed to support multilingual use, equipped with features that facilitate distance learning. The LMS prototype was then developed and tested on a number of diaspora users in Japan. Implementation is carried out through an evaluation of the use of LMS directly, followed by data collection to measure the effectiveness of the platform.

The results show that this multilingual-based LMS significantly improves the accessibility and understanding of users of PAI materials. as many as 85% of respondents reported that they experienced a significant increase in understanding of religious materials after using the LMS, successfully overcoming language barriers and providing practical solutions for diaspora users in Japan to access religious education more easily and flexibly. This study concludes that the development of multilingual LMS is an effective strategy in supporting the sustainability of religious education for diaspora communities abroad.

1. Introduction

Along with the development of information and communication technology, the education sector has undergone a significant transformation, especially in terms of accessibility and methods of delivering learning materials. One of the innovations that is developing is the use of a Learning Management System (LMS) to support the teaching and learning process. LMS enables the management, delivery, and management of online learning resources, which is especially relevant in situations where physical access to educational institutions is limited, such as those experienced by diaspora communities. Indonesian diaspora residents in Japan are a group that needs access to inclusive education, including Islamic religious education. However, limitations in terms of language and culture are often obstacles. The development of a multilingual-based LMS can be a solution to improve learning accessibility for diaspora residents, so that they can stay connected to religious education according to their needs, while still maintaining cultural and religious identity.

Access to Islamic religious education is an important part of efforts to maintain religious and cultural identity for diaspora residents abroad. Law Number 20 of 2003 concerning the National Education System emphasizes the importance of religious education as part of the goals of national education, which aims to develop the potential of students to become human beings of faith, piety, and noble character. In the context of the diaspora, the challenge of maintaining these identities becomes more complex as they live in different cultural and social environments. Furthermore, in the Regulation of the Minister of Religion Number 16 of 2010 concerning the Management of Islamic Religious Education in Schools, it is stated that Islamic religious education is a right for every individual, including those abroad. Therefore, providing access to religious education through digital platforms such as multilingual-based LMS is crucial for the Indonesian diaspora in Japan.

Language is often one of the main challenges in accessing education in a foreign country. Regulation of the Minister of Education and Culture Number 23 of 2016 concerning Minimum Education Service Standards,



states that educational accessibility must be guaranteed for all students, without exception, including in the language aspect. An LMS designed with multilingual support not only facilitates diaspora citizens who do not fully master the language of their country of residence (Japan), but also provides easier access to various groups of people who speak different languages. For the context of the Indonesian diaspora in Japan, LMS that supports Indonesian, Japanese, and English can help bridge communication barriers and allow them to better understand the educational material. This is also in line with Law Number 24 of 2009 concerning the Flag, Language, and State Emblem, as well as the National Anthem, which affirms the protection of the use of the Indonesian language in various sectors, including education, both at home and abroad.

The use of technology in education has become a policy priority in various countries, including Indonesia. Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE) encourages the development of technology-based public services, including education. It is also relevant in the context of LMS development for diaspora communities, where technology plays an important role in ensuring the sustainability of education without geographical restrictions. In this case, the development of an inclusive multilingual based LMS can serve as an important means of improving the quality of religious education for diaspora residents in Japan. This is also in line with the Regulation of the Minister of Education and Culture Number 109 of 2013 concerning the Implementation of Distance Education in Higher Education, which opens up space for the use of technology in the implementation of distance education, including for non-formal or informal education such as Islamic religious education.

With the increasing number of Indonesian diaspora in various countries, including Japan, the need for access to digital-based education has become increasingly urgent. Religious education, especially Islam, plays an important role in maintaining the cultural and spiritual identity of diaspora residents. The development of a multilingual-based LMS for Islamic religious education not only aims to facilitate learning, but also to strengthen spiritual and cultural connections between diaspora residents and their homeland. With a strong legal basis, the development of a multilingual-based LMS is a strategic step to increase the accessibility of learning resources, especially Islamic religious education for diaspora residents in Japan. This initiative not only supports the national education vision, but also meets the growing needs of the diaspora. The use of LMS-based educational technology that supports multiple languages will help ensure that every individual has the same opportunity to get a quality education, in accordance with their religious values.

2. Theory

Islamic Religious Education (PAI) has a central role in shaping the religious, spiritual, and moral identities of Muslims around the world. For Muslims living in non-Muslim-majority countries, such as the Indonesian Muslim diaspora in Japan, PAI serves as an important instrument to maintain and strengthen Islamic identity, as well as to instill moral and ethical values taught in Islam. The Muslim diaspora often faces challenges in carrying out religious and educational activities, especially because they are in different cultural environments.

In the context of the diaspora, religious education is not only limited to the transmission of religious knowledge, but also concerns the formation of Islamic identity in a different cultural and social environment. According to Tarmidzi (2020), Muslims in the diaspora are faced with a situation where they have to maintain their religious identity in the midst of a non-Muslim majority society. This poses a challenge for the Muslim diaspora, especially when they have to adapt to cultural norms and practices that are different from their home countries.

In this context, PAI plays an important role in providing a clear understanding of Islamic teachings, as well as teaching how to practice these teachings in different environments. Islamic religious education in the diaspora not only serves to maintain religious identity, but also to build a bridge between religious values and a new social environment. The Muslim diaspora in Japan, for example, has to face the fact that they live in a country that has different cultural values and traditions, such as discipline, hard work, and collectivism, which may differ from the values they embrace in their home countries.

Tarmidzi (2020) emphasized that PAI abroad requires a different approach compared to in the country of origin. Religious education in the diaspora must accommodate differences in language, culture, and social conditions in the destination country. One of the important aspects of religious education in the diaspora is the importance of access to relevant and easy-to-understand learning resources. PAI materials used in the country of origin may not always be appropriate to the social and cultural context of the countries in which the diaspora lives, requiring adjustments to be more relevant to the Muslim community in the diaspora.



In addition to the challenges in accessing learning resources, Islamic religious education also functions as a religious identity formation for the younger generation of the Muslim diaspora. In many diaspora communities, including in Japan, the second or third generation may have grown up in an environment far from the strong Islamic culture. In this situation, PAI is one of the main ways to keep Islamic values maintained and well understood by the younger generation.

According to research conducted by Sukarno (2019), effective Islamic religious education in the diaspora must be able to bridge generational differences, where young generations born or raised in non-Muslim countries may have different views on religion compared to their parents who are still strongly attached to the culture of origin. Religious education that is able to adapt to the context of diaspora life can play an important role in maintaining religious identity while providing a contextual understanding of how to practice religion in non-Muslim countries.

In a multicultural environment such as the Muslim diaspora in Japan, the teaching of Islam must be done in a more inclusive and contextual way. This is important because the Muslim diaspora is in a culturally and linguistically diverse environment. Teaching that focuses on only one approach or one language may not be effective in conveying religious messages to diverse communities.

PAI in the diaspora must be more flexible in its approach, which includes the use of different languages, learning media, and methods that can accommodate the different needs of students. It is essential to ensure that all members of the community, both adults and children, have equal access to quality religious education that is relevant to their needs in the diaspora.

Learning Management System (LMS) is a technology platform designed to manage, deliver, and evaluate educational programs online. LMS has grown rapidly as the demand for flexible and accessible distance education increases. In the context of modern education, LMS has become an important tool to facilitate learning, both in formal and non-formal educational institutions, including in religious education.

The LMS has a number of features designed to support the distance learning process, including learning content management, user management, schedule and task management, and evaluation mechanisms such as quizzes and online assignments. According to Bates (2015), LMS is a very flexible platform and can be adapted for various learning needs, from primary education to higher education, as well as for training and professional development.

Modern LMSs are generally designed to support a variety of learning formats, including videos, texts, quizzes, and interactive discussions. This allows teachers to use a variety of learning approaches, so that the subject matter can be delivered more interestingly and effectively. In addition, LMS also allows efficient student management, including tracking learning progress, evaluating learning outcomes, and providing direct feedback.

One of the main advantages of an LMS is its ability to support self-paced learning. Students can access the subject matter anytime and from anywhere, so they can learn at the pace and time that best suits their needs. This is especially relevant in the context of the diaspora, where students may have limited time and space to attend face-to-face religious education.

Distance education has become a very popular alternative in the modern era, especially after the COVID-19 pandemic which forced many educational institutions to switch to online learning methods. LMS facilitates distance education by providing a structured platform for teaching and learning. In the context of Islamic religious education, LMS can provide broad access to quality educational resources, including lectures, Quranic commentaries, and hadith studies presented by prominent scholars.

According to Bates (2015), LMS allows interactive teaching, where students are not only passive recipients of information, but also play an active role in the learning process through discussions, assignments, and other activities. These interactive features are especially important in religious education, where in-depth discussion and reflection are often an integral part of the learning process.

In the context of the diaspora, multilingual-based LMS has become very relevant, as it allows learners who have different language and cultural backgrounds to learn in a language they understand. An LMS that supports more than one language can help overcome the language barrier that is often a barrier in distance education, especially for communities living in non-Muslim countries like Japan.



Kim (2018) showed that LMS that supports more than one language is able to increase the motivation and learning participation of students who have different language and cultural backgrounds. This is especially important in Islamic religious education in the diaspora, where the Muslim community is made up of individuals who may have limitations in understanding the language of the host country. For example, for the Indonesian Muslim diaspora in Japan, access to Islamic religious education in Indonesian is very important, given that most members of the community may not be fully fluent in Japanese.

In addition, a multilingual-based LMS also allows for inclusivity in learning. Learners from different language backgrounds can learn together on a single platform, but with materials tailored to the language they understand. This not only improves accessibility, but also encourages greater engagement in the learning process.

The use of multilingual-based LMS in Islamic religious education in diaspora communities offers many advantages. One of the main advantages is its ability to bridge language differences among community members. In many diaspora communities, including the Indonesian Muslim diaspora in Japan, the language skills of community members are very diverse. Some may be fluent in Japanese, while others may be more comfortable using Indonesian or English. An LMS that supports more than one language can provide a practical solution to overcome these differences.

A multilingual-based LMS is very beneficial in ensuring that Islamic religious education is accessible to all members of the community, without exception. In the context of the diaspora, the ability to learn in a well-understood language is essential, since religious education is not only about theoretical knowledge, but also about understanding and internalizing religious values.

According to Kim (2018), the use of multilingual-based LMS can increase students' involvement in the learning process, because they can learn in the language they are proficient in. This is important in religious education, where a deep understanding of religious texts is needed. If students have difficulty understanding the language of instruction, then their understanding of religious teachings will also be hampered.

In addition, a multilingual-based LMS allows for more effective delivery of material. For example, religious lectures or Quranic interpretations delivered in Indonesian may be easier to understand by the Indonesian Muslim diaspora in Japan, compared to material delivered in Japanese or English. This not only improves the quality of learning, but also ensures that religious teachings are accessible to all members of the diaspora community.

The development of LMS in the context of Islamic education requires special attention to the unique characteristics of religious education. Religious education not only conveys information, but also aims to shape students' behaviors, values, and faith. In this case, the LMS must be designed in such a way that it is able to provide material that is not only informative, but also inspiring and relevant to Islamic values.

According to Hasan (2019), LMS used in Islamic religious education must be designed to present material that is relevant to the religious context, both in terms of content and approach. The materials taught must be able to help students to understand and internalize Islamic values in daily life.

For example, in the teaching of the Quran and Hadith, the LMS must be able to provide an in-depth explanation of the interpretation and historical context of these texts. Additionally, the LMS should also provide a space for discussion and reflection, as the religious learning process often involves in-depth discussions about how religious teachings are applied in real life.

An LMS should also be designed to support flexible learning. For diaspora communities that may have busy schedules or time differences with their home countries, LMS must be able to provide flexible access to learning materials. Students must be able to learn anytime and anywhere, without being tied to a strict schedule. This is especially important in the context of the diaspora, where many community members may work or live different lives than the Muslim community in the home country.

One of the advantages of an LMS is its flexibility in providing access to religious education. LMS allows learners to learn independently and follow learning according to their own schedule. This is especially relevant for the Muslim diaspora who may not have much free time to attend face-to-face classes or other religious activities.

By using LMS, the Muslim diaspora can access religious learning materials anytime and anywhere, without having to be tied to a specific time or place. For example, a diaspora worker in Japan who has a busy work



schedule can still take religious education classes online in the evening or on weekends, according to the availability of time. This flexibility allows more people to access religious education, even in the midst of their busy lives.

In addition, LMS also allows the use of various formats of learning materials, such as videos, texts, quizzes, and interactive discussions. This makes the learning process more interesting and varied, so that students can choose the learning format that best suits their learning style. For example, a learner who prefers to learn visually may access videos of religious lectures, while another may prefer to read religious texts or participate in online discussions.

The development of a multilingual-based LMS in the context of religious education requires content adjustments to suit the needs of students. The religious education materials developed must be adapted to the language, culture, and social context of the diaspora community. For example, in Islamic religious education in the Indonesian Muslim diaspora in Japan, the material delivered in Indonesian may need to be adapted to the context of life in Japan, including the challenges faced by the Muslim diaspora in practicing religion in non-Muslim countries.

Content customization is also important to ensure that learning materials are accessible to all students, without exception. Multilingual-based LMS allows for the delivery of material in multiple languages, so that learners who are not fluent in one language can still access religious education in the language they understand. For example, religious lectures delivered in Indonesian can be translated into Japanese or English, so that students from different language backgrounds can learn together on one platform.

With the existence of a multilingual-based LMS, the Indonesian Muslim diaspora in Japan can access Islamic religious education that is relevant, easy to understand, and according to their needs. This not only helps to maintain their religious identity in a foreign country, but also supports their spiritual and moral development in the midst of culturally and socially different environments.

3. Methods

LThis study uses a research and development (R&D) approach with the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model. This model was chosen because it is suitable for product development in the form of a multilingual-based LMS that can be tested and evaluated systematically

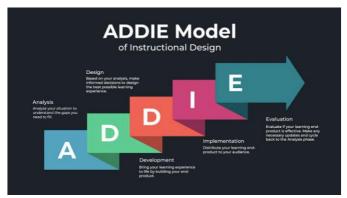


Figure 1. ADDIE Models

The subject of this study is the Indonesian Muslim diaspora living in Japan. The sample was taken from diaspora communities in several major cities in Japan such as Tokyo, Osaka, and Nagoya. Sample selection was carried out by purposive sampling to get participants relevant to the research topic.

The data collection methods in this study include Observation: Observing the conditions and needs of Muslim diaspora residents in Japan related to Islamic religious education. Interviews: Conduct in-depth interviews with resource persons from the diaspora community, Islamic education experts, and educational technology developers. Questionnaires: Distribute questionnaires to participants to collect data on their perceptions, needs, and satisfaction levels with the LMS platform developed. Document Study: Collect and analyze literature relevant to the development of LMS, Islamic education, and the condition of the Muslim diaspora in Japan.

The data was analyzed using qualitative and quantitative approaches. Qualitative data from interviews and observations were analyzed using thematic analysis techniques, while quantitative data from questionnaires



were analyzed using descriptive statistics to evaluate the effectiveness and satisfaction of users with the LMS.

4. Results

L The development of digital technology has opened up many opportunities to access education in a more flexible and inclusive manner, including in the field of Islamic Religious Education (PAI). One of the important innovations that is able to answer this challenge is the multilingual-based Learning Management System (LMS). This LMS is designed to facilitate online learning in multiple languages, thus expanding accessibility for users with different language backgrounds. Especially among the Muslim diaspora in countries such as Japan, multilingual-based LMS is a very effective tool to support religious education, overcome language barriers, and provide practical and flexible solutions.

In the context of the diaspora Muslim community in Japan, many face great challenges in accessing Islamic religious education. Language factors, limited educational resources available locally, and strict schedules make it difficult for many diaspora to stay connected to religious education. Research conducted on the use of multilingual-based LMS shows that this digital platform is able to significantly increase user accessibility and understanding of Islamic Religious Education materials, especially for those who have limitations in understanding the language of instruction such as Arabic or Indonesian.

Japan, as a country known for its homogeneity, has a fairly small Muslim community compared to other countries. Based on data from The Pew Research Center, the Muslim population in Japan is estimated to be only about 0.2% of the country's total population. Most of these Muslim communities are diaspora who come to work or study, and they come from different countries with different language backgrounds, such as Indonesia, Malaysia, Pakistan, and Middle Eastern countries. In the midst of this diversity of languages, there is a great challenge to access religious education which is generally delivered in Arabic or, in some cases, Indonesian and Urdu.

This language barrier is becoming more complex considering that the majority of the Muslim diaspora in Japan does not have sufficient Arabic language skills to understand the main sources of Islamic teachings such as the Qur'an, hadith, and other Islamic literature. In addition, time constraints due to work or study often make it difficult for these communities to attend physically held religious classes. As such, many feel spiritually isolated and find it difficult to access quality religious education that is relevant to their needs.

This study explores how the use of multilingual-based LMS can be a practical solution to overcome these obstacles. A multilingual-based LMS is a digital platform designed to provide learning materials in multiple languages, allowing users to choose the language they understand well. With this feature, users who are not fluent in Arabic or other languages of instruction can still understand religious education content better.

Studies conducted on diaspora Muslim communities in Japan show that the use of multilingual-based LMS significantly increases accessibility to Islamic Religious Education materials. Users can choose the language that is most convenient for them, for example Indonesian, English, or even Japanese. This makes the LMS inclusive and relevant for the diaspora who come from different language backgrounds.

In addition, the results of the study also revealed that this LMS allows for more flexible learning. Most of the respondents to this study work or study in Japan with tight schedules, so they really appreciate the time flexibility offered by LMS. They can access the material anytime and anywhere, without having to be tied to a rigid class schedule. This feature provides a practical solution for diaspora who have difficulty managing time to attend religious classes conventionally.

One of the important findings of this study is the improvement of users' understanding of Islamic Religious Education materials after using a multilingual-based LMS. In a survey conducted on the diaspora Muslim community in Japan, as many as 85% of respondents reported that they experienced a significant increase in their understanding of religious materials after using this LMS. They stated that with the choice of language, they can focus more on the content of the material without being distracted by the difficulty of understanding the language of instruction.

Furthermore, many users also revealed that it was easier for them to understand religious concepts that they had previously had difficulty digesting. With translations in languages they understand, such as Indonesian or English, users feel more comfortable and confident in learning Islamic teachings in depth. In addition, some users also praised the existence of interactive features such as quizzes and discussion forums within the LMS,



which allow them to actively participate in the learning process and deepen their understanding through interaction with fellow users.

This study also shows that multilingual-based LMS helps overcome the dependence on teachers or ustadz who speak only one language. Diaspora users in Japan, for example, often have trouble finding religious teachers who can teach in a language they understand. With a multilingual LMS, this obstacle can be overcome, as the material is presented in multiple languages and available online, making it easy to access and allowing users to learn independently.

The success of this multilingual-based LMS in increasing accessibility and understanding of Islamic Religious Education is not only felt by individuals, but also provides benefits to the Muslim diaspora community as a whole. In this study, it was found that this platform helps maintain the sustainability of religious education for Muslim communities abroad, especially in countries such as Japan, where physical religious education resources are very limited.

Through this LMS, the Muslim community in Japan can stay connected to religious education even though it is far from Islamic education centers in their home countries. In addition, these LMSs also help to create a stronger network of learning communities, where users can interact with each other, share experiences, and deepen their knowledge together. This is especially important for the Muslim diaspora who often feel isolated in a country where the majority of the population is non-Muslim.

In addition, this multilingual LMS also allows for a wider cultural exchange, as users from different countries can interact and learn from each other. This creates a more inclusive and global learning environment, where intercultural and religious understanding can be enhanced. The findings of this study can be concluded that the development of multilingual-based LMS is an effective strategy in supporting the sustainability of religious education for Muslim diaspora communities abroad. This LMS has succeeded in overcoming language barriers that are often the main obstacle in accessing Islamic Religious Education materials, as well as providing practical and flexible solutions for diaspora users in Japan. By increasing accessibility and understanding of religious materials, multilingual LMS has the potential to support the spiritual and intellectual growth of diaspora Muslim communities in various parts of the world. The following are the results of the research in the form of Steps:

1. Identify User Needs

Based on the results of observations and interviews, it was found that the Muslim diaspora in Japan has an urgent need for learning resources that are easily accessible and understood. The main obstacles faced are limited access to learning resources in Indonesian or English, as well as difficulties in understanding learning resources in Japanese. Therefore, multilingual-based LMS is a relevant solution to overcome this problem.



Figure 2. Identify LMS user needs



Here is an image that represents the identification of user needs for an LMS designed for the Muslim diaspora in Japan. The chart showcases key areas such as language accessibility (multilingual support for Arabic, English, Japanese, and Indonesian), flexible study schedules, mobile-friendly access, culturally appropriate content, and interactive features such as quizzes and forums.

2. Multilingual-Based LMS Development

The LMS development stage is carried out by paying attention to the results of the analysis of user needs. The LMS developed supports three main languages, namely Indonesian, Japanese, and English. The Islamic Religious Education material presented includes video lectures, articles, and discussion forums designed to be interactive and relevant to diaspora life. The LMS interface is designed to be simple and easy to use, with intuitive navigation for users of various age and educational backgrounds.



Figure 3. Development of a multilingual-based LMS in Japan

The following is an illustration of the development of a multilingual-based LMS in Japan, illustrating how the platform assists users in accessing Islamic Religious Education materials in multiple languages. This image shows the integration of digital technology with Japan's unique cultural background, while providing flexibility and inclusivity for the diaspora community and local users.

3. Implementation and Testing

The LMS is implemented to a small group of participants as a trial stage. Participants were given access to use the LMS for 6 months, focusing on evaluating ease of access, material quality, and delivery effectiveness. The results of the evaluation showed that most users found it easier to understand the PAI material, mainly because of the option to choose the language they were proficient in.



Figure 4. Implementation and Trial of a multilingual-based LMS in Japan

The following is an illustration of the implementation of a multilingual-based LMS in Japan designed to facilitate Islamic religious education for the diaspora community. The LMS features dashboards in multiple



languages, allowing for broader and more inclusive access for users from different cultural and linguistic backgrounds

4. Challenges in Development

One of the main challenges faced in the development of a multilingual-based LMS is the difficulty in harmonizing the translation of Islamic religious materials into Japanese while maintaining its theological meaning. In addition, technical problems such as the availability of internet bandwidth in some regions are also an obstacle in the delivery of material that uses video formats.



Figure 5. Challenges and Development

Here is the illustration showing the challenges in developing a Learning Management System (LMS) for the Diaspora Japan community. Let me know if you'd like any adjustments or further details.

5. Discussion

L This study comprehensively shows that the development of a multilingual-based Learning Management System (LMS) is an effective solution to improve the accessibility and quality of Islamic Religious Education (PAI) learning for the Muslim diaspora community in Japan. In the context of the diaspora, access to relevant and easy-to-understand religious learning resources is an urgent need, especially for those who experience limitations in mastering Japanese as a local language. The multilingual-based LMS developed in this study has provided significant benefits in overcoming these challenges. Through features that support Indonesian, Japanese, and English, this LMS allows the diaspora community to choose a language that suits their preferences and abilities. This is very important because differences in language skills can be a major barrier to accessing and understanding religious materials, especially for the first and second generations of the diaspora. The existence of multilingual options also helps to strengthen the internalization of Islamic teachings, which were previously difficult to achieve due to language barriers and cultural differences. Thus, this LMS acts as a bridge between complex religious teachings and the unique context of Muslim diaspora life in Japan. The development of this LMS has also succeeded in creating a flexible and interactive learning environment, which is indispensable for diaspora communities that have various busy and uncertain schedules. The material presented in various formats, such as videos, articles, and discussion forums, not only makes learning more engaging but also relevant to their daily situation. Interaction through discussion forums provides a space for the Muslim diaspora to share experiences and knowledge, thereby strengthening the sense of community between them.

Acknowledgements

We would like to thank the Ministry of Education, Culture, Research and Technology, Ibn Khaldun University Bogor, colleagues who have supported this research process very well.

References:

- [1] Bates, A. W. (2015). Teaching in a Digital Age: Guidelines for Designing Teaching and Learning. Vancouver: Tony Bates Associates Ltd.
- [2] Hasan, M. (2019). "The Role of Islamic Education in Diaspora Communities." Journal of Islamic Studies, 17(3), 215230.
- [3] Kim, J. (2018). "Multilingual Learning Systems: A Case Study on Enhancing Educational Accessibility for Migrant



Students." International Journal of ELearning, 12(2), 98110.

- [4] Tarmidhi, H. (2020). "Islamic Education in Diaspora: Challenges and Opportunities." Journal of Islamic and Global Affairs, 11(1), 4561.
- [5] Al-Azawei, A., Parslow, P., & Lundqvist, K. (2017). Barriers and opportunities of e-learning implementation in Iraq: A case of public universities. International Review of Research in Open and Distributed Learning, 18(1), 1-23. https://doi.org/10.19173/irrodl.v18i1.2621
- [6] Al-Hunaiyyan, A., Bimba, A., Al-Sharhan, S., & Alhajri, R. (2020). A multicultural approach to evaluating online learning experiences in higher education. Education and Information Technologies, 25(1), 1-27. https://doi.org/10.1007/s10639-019-09983-2
- [7] Sirikul, P., & Dorji, R. (2021). The design and development of a multilingual learning management system for a transnational education setting. Journal of Interactive Learning Research, 32(1), 1-24. https://www.learntechlib.org/primary/p/218177/
- [8] Anderson, T., & Dron, J. (2011). Three generations of distance education pedagogy. International Review of Research in Open and Distance Learning, 12(3), 80-97. https://doi.org/10.19173/irrodl.v12i3.890
- [9] Martins, J. T., & Nunes, M. B. (2016). Approaches and methodologies in learning management system implementation: A case study in Portuguese higher education. International Journal of Information and Education Technology, 6(1), 54-59. https://doi.org/10.7763/IJIET.2016.V6.655
- [10] Granić, A., Mifsud, C., & Ćukušić, M. (2009). Design, implementation and validation of a Europe-wide multilingual, educational portal. Educational Technology & Society, 12(4), 135-147. https://www.j-ets.net/ETS/journals/12_4/11.pdf
- [11] Raspopovic, M., Cvetanovic, S., Medan, I., & Ljubojevic, D. (2017). The effects of integrating social learning environment with online learning. International Review of Research in Open and Distributed Learning, 18(1), 141-160. https://doi.org/10.19173/irrodl.v18i1.2645
- [12] Ssekakubo, G., Suleman, H., & Marsden, G. (2011). Issues of adoption: Have e-learning management systems fulfilled their potential in developing countries? Proceedings of the South African Institute of Computer Scientists and Information Technologists Conference, 2011, 231-238. https://doi.org/10.1145/2072221.2072248
- [13] Jalil, M. A., & Khalid, R. (2017). Multilingualism in e-learning: Promoting diversity in higher education. Journal of Applied Research in Higher Education, 9(4), 535-552. https://doi.org/10.1108/JARHE-05-2016-0033
- [14] O'Neill, K., Singh, G., & O'Donoghue, J. (2004). Implementing eLearning programmes for higher education: A review of the literature. Journal of Information Technology Education, 3(1), 313-323. https://doi.org/10.28945/275
- [15] Indonesian. (2003). Law Number 20 of 2003 concerning the National Education System. Statute Book of the Republic of Indonesia Year 2003 Number 78. State Secretariat. Jakarta.
- [16] Indonesian. (2010). Regulation of the Minister of Religion Number 16 of 2010 concerning the Management of Islamic Religious Education in Schools. State Gazette of the Republic of Indonesia Year 2010 Number 454. Ministry of Religious Affairs. Jakarta.
- [17] Indonesian. (2016). Regulation of the Minister of Education and Culture Number 23 of 2016 concerning Minimum Education Service Standards. State Gazette of the Republic of Indonesia Year 2016 Number 656. Ministry of Education and Culture. Jakarta.
- [18] Indonesian. (2009). Law Number 24 of 2009 concerning the Flag, Language, and State Emblem, as well as the National Anthem. Statute Book of the Republic of Indonesia Year 2009 Number 109. State Secretariat. Jakarta.
- [19] Indonesian. (2018). Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE). Statute Book of the Republic of Indonesia Year 2018 Number 174. State Secretariat. Jakarta.
- [20] Indonesian. (2013). Regulation of the Minister of Education and Culture Number 109 of 2013 concerning the Implementation of Distance Education in Higher Education. State Gazette of the Republic of Indonesia Year 2013 Number 1386. Ministry of Education and Culture. Jakarta.