Al-Muyassar: Journal of Arabic Education
Vol. 5, No. 1, 2026, pp. 1–20
E-ISSN 2829-095X
DOI: https://dx.doi.org/10.31000/al-muyassar.v5i1.16027
Received: Mar 9, 2026; Revised: Apr 1, 2026; Accepted: 3 Apr, 2026

Enhancing the Quality of Arabic Language Learning through Microlearning Platforms: A Quantitative Analysis

تحسين جودة تعليم اللغة العربية عبر منصّات التعلّم المصغّر: دراسة تحليلية كمية

Afriza[1], Alwizar[2], Aria Lada Br Bancin[3], Halomoan[4*]
[1,2,3]Universitas Islam Negeri Sultan Syarif Kasim Riau
[4]Universitas Negeri Padang
*Corresponding E-mail: halomoan@fis.unp.ac.id

ABSTRACT

The development of digital technology has significantly transformed learning practices, including language education. One emerging approach in digital learning is microlearning, which emphasizes short, focused, and easily accessible learning content. This study aims to analyze the utilization of microlearning platforms in improving the quality of Arabic language learning in Madrasah and to examine the factors influencing its effectiveness. The research employed a quantitative approach with a descriptive method. The participants consisted of 37 Arabic language teachers from various Madrasah in Riau Province, selected through a random sampling technique. Data were collected using a 25-item Likert-scale questionnaire and analyzed using descriptive statistical techniques to identify trends in microlearning usage and learning quality.

The results show that the utilization of microlearning platforms falls into the very high category, with an average score of 51.70 out of 60 (86.17%). Similarly, the quality of Arabic language learning supported by microlearning is categorized as very high, with an average score of 55.32 out of 65 (92.2%). Compared to conventional approaches, which tend to be longer and less flexible, microlearning offers advantages through concise, accessible, and student-centered learning experiences. Furthermore, its effectiveness is influenced by factors such as student engagement and the availability of digital infrastructure. These findings indicate that microlearning contributes positively to enhancing learning effectiveness. Therefore, integrating microlearning can serve as an innovative strategy to improve Arabic language learning quality in the digital era.

Keywords: Microlearning; Arabic Language; Educational Technology; Digital Learning; Madrasah.

مستخلص البحث

أحدث تطور التكنولوجيا الرقمية تحولاً جذرياً في ممارسات التعلم، بما في ذلك تعليم اللغات. ومن بين الأساليب الناشئة في التعلم الرقمي، التعلم المصغر، الذي يركز على محتوى تعليمي قصير ومركز وسهل الوصول إليه. تهدف هذه الدراسة إلى تحليل استخدام منصات التعلم المصغر في تحسين جودة تعلم اللغة العربية في المدارس الدينية، ودراسة العوامل المؤثرة في فعاليته. استخدم البحث منهجاً كمياً وصفياً. شملت عينة الدراسة 37 معلماً للغة العربية من مدارس دينية مختلفة في محافظة رياو، تم اختيارهم عشوائياً. جُمعت البيانات باستخدام استبيان مكون من 25 بنداً وفق مقياس ليكرت، وحُللت باستخدام أساليب إحصائية وصفية لتحديد اتجاهات استخدام التعلم المصغر وجودة التعلم.

أظهرت النتائج أن استخدام منصات التعلم المصغر يندرج ضمن فئة الاستخدام العالي جداً، بمتوسط 51.70 من 60 (86.17%). وبالمثل، تُصنّف جودة تعلّم اللغة العربية المدعوم بالتعلّم المصغر بأنها عالية جدًا، بمتوسط درجات 55.32 من 65 (92.2%). وبالمقارنة مع الأساليب التقليدية، التي تميل إلى أن تكون أطول وأقل مرونة، يُقدّم التعلّم المصغر مزايا من خلال تجارب تعليمية موجزة وسهلة الوصول ومُركّزة على الطالب. علاوة على ذلك، تتأثر فعاليته بعوامل مثل تفاعل الطالب وتوافر البنية التحتية الرقمية. تُشير هذه النتائج إلى أن التعلّم المصغر يُسهم إيجابًا في تعزيز فعالية التعلّم. لذلك، يُمكن أن يُشكّل دمج التعلّم المصغر استراتيجية مبتكرة لتحسين جودة تعلّم اللغة العربية في العصر الرقمي.

الكلمات المفتاحية: التعلّم المصغّر؛ اللغة العربية؛ تكنولوجيا التعليم؛ التعلّم الرقمي؛ المدرسة الدينية.

Citation:
Afriza et al. (2026). Enhancing the Quality of Arabic Language Learning through Microlearning Platforms: A Quantitative Analysis. *Al-Muyassar: Journal of Arabic Education*, 5 (1): 1–20

INTRODUCTION

The development of information and communication technology in recent decades has brought significant changes in various aspects of human life, including in the field of education. Digital transformation not only affects the way humans access information, but also changes the learning paradigm from conventional to more flexible, collaborative, and technology-based learning (Kayyali, 2025; Tselykovskiy et al., 2025). Digital technology allows for wider access to learning resources, without time and location restrictions (Çaldağ et al., 2025; Jack et al., 2023), Technology also supports project-based learning and case studies that involve more intensive interaction and communication (Kaewunruen, 2019).

In the context of the education system in Indonesia, improving the quality of learning is one of the strategic agendas regulated through the National Education Standards policy. Thus, the learning process must be designed to encourage active interaction between teachers and students, as well as between students and other students (Arrafii, 2023). Activity-based learning (ABL) and participatory learning approaches have been shown to significantly improve students' engagement, motivation, and critical thinking skills (Al Shloul et al., 2024). Learning process standards require teachers to possess adequate pedagogical competence in systematically designing, implementing, and evaluating instruction. In this context, teachers' ability to effectively manage learning—encompassing planning, implementation, and assessment—constitutes a critical determinant of instructional quality. For instance, at the planning stage, teachers are expected to develop structured lesson plans that are responsive to students' needs while integrating innovative approaches such as microlearning to enhance engagement. During the implementation phase, the use of interactive strategies, including problem-based learning and multimedia-assisted instruction, has been shown to improve students' comprehension and participation. Furthermore, in the evaluation stage, the application of technology-based formative assessment enables continuous monitoring of students' learning progress and supports data-driven instructional decisions.

In addition, the enhancement of teachers' pedagogical competence can be facilitated through sustained professional development initiatives, such as curriculum development workshops, training in educational technology integration, and

participation in professional learning communities that promote reflective practice and the exchange of best practices. Therefore, the development of pedagogical competence should not be viewed merely as a theoretical construct, but rather as a practical and contextually grounded capacity that directly influences the effectiveness of teaching and learning processes.

Along with the development of digital technology, the demands on teacher competence have also undergone significant changes. Teachers must be able to design and implement interactive and personalized learning experiences using digital devices (Jha et al., 2024; Zou et al., 2025). Mastery of digital skills is an important aspect in improving the quality of learning because digital technology allows the presentation of material in a more varied, interesting, and easily accessible manner by students. Various digital learning platforms such as Learning Management System (LMS), LMS platforms are designed to develop, deliver, and manage learning courses and resources. The platform supports a variety of learning methods, including traditional, online, blended, and distance learning (Dahal et al., 2023; Madyatmadja, 2023).

One of the digital learning approaches that has developed rapidly in recent years is microlearning, where microlearning breaks down complex information into smaller and manageable parts, making it easier for students to digest and remember information (Sozmen, 2022; Zavodna et al., 2024). This approach is based on the assumption that learners have a limited attention span, so learning materials need to be presented in a simple and structured manner to make them easier to understand and remember. In addition, microlearning also allows learners to access content on various digital platforms, including mobile devices, making it possible to learn anywhere and anytime (Coccoli et al., 2011; Moore et al., 2024; Salas-Díaz & González-Bello, 2023; Triana et al., 2021; Yadav et al., 2025).

In the educational literature, microlearning is seen as one of the effective learning strategies in increasing learners' engagement and learning retention, This approach is particularly effective in a fast-paced environment where learners are inundated with information every day (Hassan et al., 2024), This approach allows learners to learn the material gradually and repeatedly so that the process of internalizing knowledge becomes more effective. Microlearning has been shown to be effective in meeting specific and practical learning needs, as well as improving the efficiency of content delivery. This

educational strategy involves short, focused learning units that can be easily integrated into daily routines, making them highly adaptable and accessible (Sozmen, 2022; Zavodna et al., 2024). In addition, Hug explained that microlearning is a learning approach that is very relevant to the development of digital technology because it is able to accommodate the characteristics of modern students who have a tendency to access information quickly through digital devices. The presentation of material in the form of short content, such as short videos, infographics, or interactive quizzes, allows students to understand the material more effectively and interestingly (Hug, 2005).

In the context of Islamic education, especially in madrasah, the integration of digital technology in the learning process is still developing. Madrasah, as an Islamic educational institution, has a strategic role in building a generation that not only has academic competence but also has strong Islamic character and values. Therefore, professional development and adequate training for teachers are essential to effectively integrate technology while preserving Islamic values (Wedi & Mardiana, 2025). Arabic learning in madrasas constitutes a field of study with a relatively high level of complexity, given its dual function as both a medium of communication and a foundational tool for accessing Islamic sources. Unlike other foreign languages, Arabic occupies a central position in religious, intellectual, and cultural domains, serving as the primary language for understanding the Qur'an, Hadith, and classical Islamic scholarship. This multidimensional role requires learners not only to master linguistic competencies but also to engage with intricate grammatical structures, rich vocabulary systems, and diverse textual traditions.

However, students often encounter specific challenges, including difficulties in comprehending complex syntactic patterns, limited exposure to authentic language use, and low motivation due to traditional teaching approaches. These challenges highlight the need for more innovative pedagogical strategies. Integrating technology-based learning tools and adopting competency-based approaches can facilitate more interactive and contextualized learning experiences. Empirical findings from recent studies also indicate that the use of digital media and microlearning strategies can significantly enhance students' engagement and comprehension, thereby addressing the inherent complexity of Arabic learning in madrasah.Therefore, learning Arabic in Madrasah requires effective learning methods and strategies, such as the integration of

ICT in Arabic language learning, which has been proven to increase teacher competence and student involvement. Tools such as Lectora Inspire for vocabulary learning and Web 2.0 technology for reading skills can significantly improve learning outcomes (Kuntz, 2013; Makruf & Barokah, 2023). However, in practice, learning Arabic in madrasah still often faces various obstacles, especially related to learning methods that are still conventional and do not utilize technology-based learning media. This condition causes some students to have difficulty understanding Arabic learning materials optimally. Therefore, the use of innovative learning approaches such as microlearning can be an alternative learning strategy that is more effective and in accordance with current educational technology developments.

A number of previous studies have examined the use of microlearning in the learning process at various levels of education. Research conducted by Bruck, Motiwalla, and Foerster shows that the microlearning approach is able to increase knowledge retention and student involvement in the learning process (Bruck et al., 2012). Other research conducted by Giurgiu also revealed that microlearning is an effective learning strategy in meeting practical and contextual learning needs. The results of the study show that microlearning is able to improve learning efficiency because students can access learning materials flexibly through digital devices (Giurgiu, 2017), video-based microlearning quizzes have been shown to encourage student engagement and active participation, which is very important to maintain motivation (Chemsi et al., 2025), the integration of microlearning in digital learning platforms enriched with interactive elements and multimedia, in line with the digital preferences of modern learners, thereby increasing engagement and understanding (Santosa et al., 2025).

Although these studies show that microlearning has great potential in increasing learning effectiveness, academically, there are still research gaps that need to be studied further. First, most research on microlearning still focuses on the context of higher education or general education, while studies that specifically examine the application of microlearning in madrassas are still relatively limited. Second, existing research emphasizes aspects of learning motivation and student involvement, while studies that link microlearning to the quality of learning comprehensively have not been carried out. Third, research that specifically examines the frequency of the use of microlearning in improving the quality of Arabic learning in madrassas is also still rarely found in the

academic literature.

Based on these conditions, research on the use of microlearning platforms in improving the quality of Arabic learning in Madrasah is important to be carried out. This study aims to analyze the use of microlearning platforms in Arabic language learning, examine the quality of Arabic learning in Madrasah, and identify the frequency of use of microlearning platforms in improving the quality of learning. The results of this research are expected to make an academic contribution to the development of technology-based learning innovations in Madrasah, as well as become a reference for teachers and education managers in optimizing the use of microlearning to improve the quality of Arabic language learning.

RESEARCH METHOD

This study uses a quantitative approach with a descriptive method. A quantitative descriptive approach is used to describe the phenomenon studied based on numerical data obtained from respondents (Creswell, 2014). Through this approach, data were analyzed using descriptive statistical techniques to explain the tendency of using microlearning platforms in learning and their relationship with the quality of Arabic language learning. Descriptive statistics are used to present an overview of data through measures of data concentration and distribution, such as mean values, medians, modes, and standard deviations (Sugiyono, 2017).

Subjects and Objects of Research

The subject in this study is an Arabic teacher who teaches in Madrasah in Riau Province. The selection of teachers as research subjects is based on their role as the main implementers in the learning process and as parties who directly utilize various media and learning platforms in teaching and learning activities (Arikunto, 2010). The object of this research is the use of microlearning platforms in improving the quality of Arabic language learning. The focus of the research is on how teachers utilize microlearning platforms in learning activities and how the frequency of their use is related to the quality of the Arabic language learning process.

Population and Research Sample

The population in this study is all Arabic teachers who teach in Madrasah in Riau Province who are involved in filling out the research questionnaire. Based on the questionnaire data that was successfully collected, the number of respondents who participated in this study was 37 Arabic teachers. Respondent sampling was carried out randomly from various Madrasah, so that the data obtained is expected to represent the conditions for using microlearning in a more diverse way (Creswell, 2014).

Data Collection Techniques

The data collection technique in this study uses two main methods, namely questionnaire and documentation.

1. Questionnaire

Questionnaire is a data collection technique that is carried out by giving a set of questions or written statements to respondents to be answered according to their conditions, experiences, and perceptions (Sugiyono, 2017). The use of questionnaires in this study aims to obtain data on the level of use of microlearning platforms in Arabic learning and teachers' perceptions of the quality of learning produced. Before being used in research, the questionnaire instrument is first tested for validity and reliability to ensure that each question item can measure the variables being studied appropriately and consistently. The validity test is conducted through an item correlation test to the total score, while the reliability test is conducted using Cronbach's Alpha coefficient. The instrument trial process was carried out on 20 Arabic teachers, but the questionnaire returned and could be analyzed by 16 respondents.

2. Documentation

The documentation method is used to complement research data related to supporting information, such as respondent profile data, learning activities, and other information relevant to the research. Documentation is a data collection technique through various written documents, images, and archives related to the research object (Sugiyono, 2017).

Research Instruments

The research instrument used in this study is in the form of a questionnaire that is compiled based on the indicators of research variables. The questionnaire aims to

measure two main variables, namely the use of microlearning platforms and the quality of Arabic language learning. The grid of research instruments can be seen in the following table:

Table 1. Research Instrument Grid

Variable	Number of Items	Item Number
Utilization of Microlearning Platforms	12	1–12
Learning Quality	13	13–25
Numbers	**25**	**1–25**

The question items in the questionnaire were compiled using a Likert scale to measure the level of approval of respondents to each given statement.

Data Analysis Techniques

The data obtained in this study were analyzed using descriptive statistical techniques. Descriptive statistical analysis is used to provide an overview of the research data, which includes mean values, median, mode, minimum and maximum values, standard deviation, and percentage. In addition, data analysis is also carried out through the following stages:

Instrument Reliability Test

The reliability test was carried out to determine the level of consistency of the research instrument. In this study, the reliability test was carried out using Cronbach's Alpha coefficient. The instrument is said to be reliable if Cronbach's Alpha value is greater than 0.70 (Ghoz Ali, 2011).

The score of the questionnaire results is then categorized into several levels of categories to facilitate data interpretation. These categories include very high, high, medium, low, and very low. This categorization is used to describe the level of utilization of microlearning platforms and the quality of Arabic learning based on respondents' perceptions.

Through this analysis technique, this study is expected to provide an empirical picture of the use of microlearning platforms in Arabic language learning and its contribution to improving the quality of learning in Madrasah.

RESULT AND DISCUSSION

The data obtained was then analyzed using the help of the SPSS program to produce descriptive statistics and frequency distribution. The respondents in this study were 37 Arabic teachers who were selected through random sampling techniques from various madrasah. The sampling technique employed in this study was intended to ensure that the data obtained could represent diverse conditions of microlearning utilization in Arabic language learning. The research instrument was structured around two principal variables: the use of the microlearning platform as the independent variable (X) and the quality of Arabic language learning as the dependent variable (Y). To ensure the accuracy and appropriateness of the instrument, a validity test was conducted involving 16 Arabic language teachers.

Specifically, the validity testing procedure applied a content and construct validation approach, in which each item was evaluated to determine its relevance and alignment with the defined research variables. The selection of the 16 teachers as research participants was based on their professional experience and active involvement in Arabic language instruction, making them suitable representatives for assessing the instrument's effectiveness. Furthermore, the results of the validity test were systematically used to refine and eliminate inadequate items before proceeding to the main data analysis. This process ensured that only valid and reliable items were included, thereby strengthening the credibility, transparency, and overall rigor of the study.

the results of the validity test can be seen in the following figure:

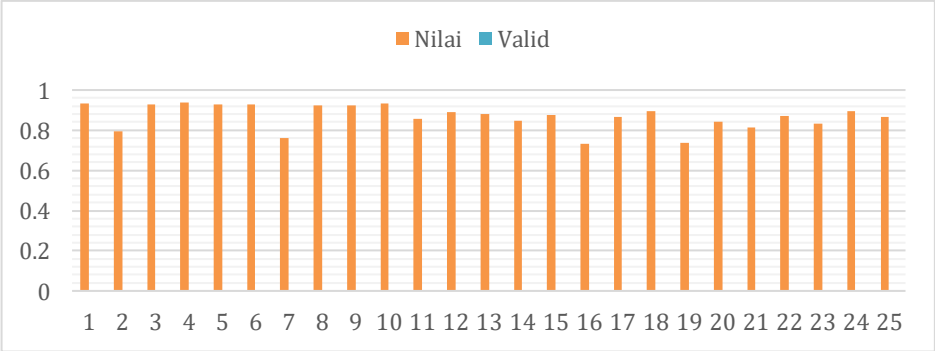

Figure 1. Instrument Validity Test Results

Based on the table, all 25 instrument items were declared valid because the

correlation value obtained was greater than the table r-value of 0.497. This shows that each item has a strong relationship to the construct being measured, so it is worthy of use in the study. The results of the instrument reliability test can be seen in Figure 2 below:

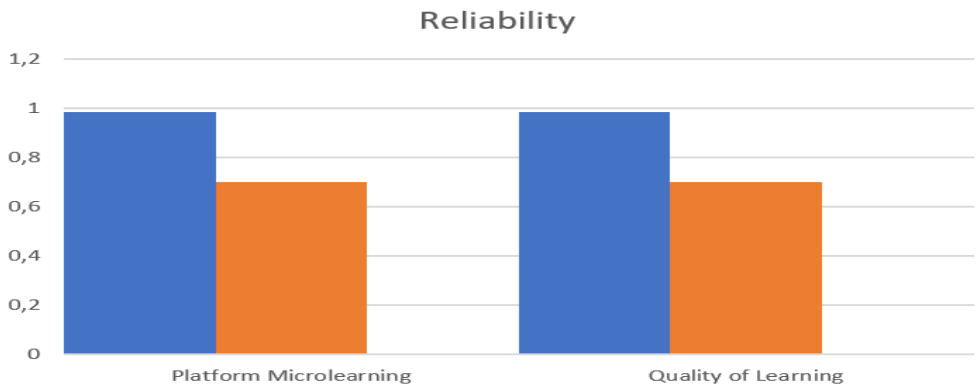

Figure 2. Research Instrument Reliability Test Results

Cronbach's Alpha value of 0.985 indicates a very high level of internal consistency. This value far exceeds the minimum reliability limit of 0.70, so it can be concluded that the research instrument has an excellent level of reliability and can be used to measure research variables consistently.

Analysis of the Utilization of Microlearning Platforms in Improving the Quality of Arabic Language Learning

Descriptive statistical analysis was carried out to determine the minimum, maximum, mean, and standard deviation values of the variables of the use of microlearning platforms in Arabic language learning. The values can be seen in the following table:

Table 2. Descriptive Statistics on the Utilization of Microlearning Platforms

		PLATFOR M MICROLE RNING
N	Valid	37
	Missing	0
Mean		51.70
Median		52.00
Std. Deviation		6.774
Minimum		24
Maximum		60

The results of the analysis showed that the average value of microlearning

platform utilization was 51.70 out of a maximum score of 60, or equivalent to 86.17%, so it was included in the very good category. This shows that most of the respondents have made optimal use of microlearning platforms in learning Arabic.

The standard deviation value of 6.774 indicates a moderate level of data dispersion, suggesting that respondents' perceptions of microlearning tend to be relatively homogeneous despite some variation in usage intensity. Furthermore, mean scores that are close to the maximum value reflect highly positive evaluations of key microlearning features, including ease of access, flexibility in learning time, and the concise and focused presentation of materials. These findings imply that microlearning is generally well-received among respondents.

However, to enhance the depth of analysis, it is important to further examine the underlying factors that may influence respondents' perceptions, such as technological literacy, institutional support, teaching experience, and access to digital infrastructure. In addition, incorporating concrete examples or empirical illustrations of how microlearning is implemented in the context of Madrasah education would provide clearer insights into its practical effectiveness. By integrating these analytical and contextual elements, the study would offer a more comprehensive understanding and make a stronger contribution to the development of technology-based learning methods. The descriptive statistical analysis of the variables of Arabic learning quality is presented in the following table:

Table 3. Descriptive Statistics of Learning Quality

		MUTU PEMBELA
N	Valid	37
	Missing	0
Mean		55.32
Median		56.00
Std. Deviation		7.056
Minimum		26
Maximum		65

Based on the results of descriptive statistical analysis, the average value of learning quality was obtained as 55.32, which is equivalent to 92.2% of the maximum score, so it is in the very good category. The standard deviation value of 7.056 shows that

the respondents' perception of learning quality is relatively homogeneous. This shows that most respondents have almost uniform views on the quality of Arabic language learning carried out with the support of microlearning platforms. The high average score shows that Arabic learning supported by microlearning platforms is considered effective by respondents. Students feel the clarity of the material delivery, the ease of understanding the concepts, and increased motivation and involvement during the learning process.

Frequency distribution analysis showed that most of the respondents were in the high category, namely 22 respondents (59.9%), while 14 respondents (37.8%) were in the very high category. These findings show that the majority of respondents make intensive use of microlearning platforms in Arabic language learning.

In addition, the frequency distribution also shows that the quality variable of Arabic language learning is dominated by the high category, which is 64.9%. This shows that Arabic learning supported by the microlearning platform has run optimally.

Overall, the dominance of respondents in the high category shows that microlearning platforms are able to support a more effective learning process through the presentation of compact, focused, and easily accessible material by students. Thus, microlearning can be seen as a relevant learning approach in improving the quality of Arabic learning in madrasah.

Discussion

The results indicate that the use of microlearning platforms in Arabic language learning falls into the "very good" category, with an average score of 86.17%. This finding provides strong evidence that microlearning-based digital technology serves as an effective strategy in enhancing the quality of Arabic instruction within the madrasah context. The high level of utilization reflects an increasing awareness among Arabic teachers of the importance of integrating digital tools to address the evolving challenges of education in the digital era.

From the perspective of modern learning theory, the adoption of microlearning has contributed to measurable improvements in both productive and receptive language skills, particularly in vocabulary acquisition, speaking fluency, and listening comprehension. For instance, short, focused learning modules enable students to

repeatedly engage with new vocabulary in context, while interactive audio-visual content supports better listening retention and pronunciation practice. In several cases, students reported higher motivation and engagement due to the flexibility and accessibility of microlearning platforms, allowing them to learn independently beyond the classroom setting.

However, despite these positive outcomes, several challenges remain. Limited access to digital infrastructure and varying levels of technological competence among teachers may hinder optimal implementation. Additionally, the lack of structured training programs for educators can affect the consistency and effectiveness of microlearning integration. Therefore, addressing these constraints is essential to ensure the sustainability and broader applicability of microlearning in Arabic language education. by incorporating these practical considerations, the findings of this study offer more comprehensive insights and stronger implications for improving instructional practices in Madrasah (Guvin Felcida & Parameswaran, 2024; Yanovets et al., 2025). Digital technology allows the learning process to take place in a more flexible, interactive, and adaptive manner to the needs of students. This is in line with the concept of microlearning which states that microlearning is a learning approach that presents material in small units that are focused, easy to understand, and accessible through digital devices (Hug, 2005). This approach allows learners to learn the material briefly but repeatedly so that they can improve comprehension and retention of information more effectively. The main characteristic of microlearning lies in the presentation of learning materials in the form of small units that focus on one specific concept (Susilana et al., 2022). This approach is particularly relevant to cognitive load theory, which explains that human working memory capacity has limitations in processing information simultaneously. Learning materials that are too complex and presented in large quantities at one time can increase the cognitive load of students so as to hinder the comprehension process. By dividing the learning material into small parts, microlearning helps students process information more efficiently and gradually. In the context of Arabic language learning, the microlearning approach has enormous potential because language learning basically requires a gradual and repetitive mastery process. Mastery of vocabulary, language structure, and reading and listening skills cannot be achieved instantly, but requires an ongoing practice process. Therefore, Microlearning

can effectively improve the four main language skills, listening, speaking, writing, and reading, by providing targeted lessons and focusing on each skill individually (Kohnke, 2023).

The results of this study also show that the standard deviation value of 6.774 indicates a relatively moderate level of data dissemination. This indicates that respondents' perception of the use of microlearning in Arabic language learning is relatively homogeneous. In other words, the majority of teachers have almost uniform views on the effectiveness of using microlearning platforms in the learning process. This homogeneity of perception shows that microlearning has been positively accepted by teachers as one of the relevant learning strategies in improving the quality of Arabic language learning. These findings are in line with research that states that the implementation of microlearning in digital learning is able to create a relatively consistent learning experience for students (Leong et al., 2021). This is due to the characteristics of microlearning, which presents learning materials in a structured and standard manner through digital platforms. Thus, students can access the same material repeatedly so that they can strengthen their understanding of the concepts learned.

The effectiveness of microlearning can also be explained through a self-directed learning perspective that emphasizes the importance of student independence in the learning process (Kohnke, 2023; Zavodna et al., 2024). In this theory, learners are seen as individuals who are active in managing their own learning process. Students have the ability to determine learning goals, choose appropriate learning strategies, and evaluate the learning outcomes they achieve. Microlearning provides a wide space for students to develop learning independence because learning materials can be accessed flexibly according to their respective learning needs and times. This flexibility is one of the main advantages of microlearning. Students are no longer completely dependent on the learning process in the classroom, but can access learning materials anytime and anywhere through digital devices such as smartphones, tablets, and computers. This is especially relevant to the digital generation, who have advanced digital skills and have integrated these skills into their lifestyles. They are comfortable exploring digital platforms and using various digital tools for communication and learning (Sumskaya, 2023).

The results of this study also showed that the quality of Arabic language learning

reached an average score of 92.2%, indicating that Arabic language learning supported by a microlearning platform is in the very good category. This high average score indicates that the use of microlearning can significantly increase learning effectiveness. Learners found it easier to understand the material, increased learning motivation, and more active engagement during the learning process. Learning motivation is a crucial factor in successful language learning (Gao, 2025). Monotonous learning that focuses solely on lecture methods often causes learners to lose interest in learning. Conversely, the use of innovative and interactive learning media can increase learner motivation. Microlearning offers various forms of engaging material presentation such as short videos, animations, interactive quizzes, and infographics that can increase learners' attention to the material being studied. This finding aligns with research stating that the use of microlearning in language learning can increase learning motivation and strengthen learners' understanding of the material being studied. The concise and focused presentation of material allows learners to learn the language gradually without feeling burdened by overly complex material (Shail, 2019).

This research also supports the findings of Bruck and Foerster, who stated that microlearning can create a more flexible and learner-centered learning experience (Bruck et al., 2012). This approach enables learners to tailor their learning process to their individual needs and abilities, making it particularly relevant in the context of Arabic language learning, where variations in learners' proficiency levels are often significant. In madrasah settings, such flexibility is essential to accommodate diverse linguistic competencies and learning paces. Microlearning, with its short, focused, and easily accessible content, offers a practical solution to address common challenges in traditional Arabic language instruction. In practice, teachers can implement microlearning by designing brief instructional modules targeting specific language skills, such as vocabulary acquisition, grammar usage, or listening comprehension. For example, educators may use short video clips, interactive quizzes, or mobile-based exercises that allow students to engage with the material at their own pace. This approach not only enhances learner autonomy but also facilitates differentiated instruction, enabling teachers to cater to students with varying levels of proficiency. However, despite its potential benefits, the implementation of microlearning in madrasah contexts may encounter several challenges. These include limited access to digital infrastructure,

varying levels of technological literacy among teachers, and the need for adequate training in designing effective microlearning content. Therefore, a comprehensive integration of microlearning requires not only pedagogical adaptation but also institutional support to ensure its effectiveness and sustainability in Arabic language education. One major issue is limited classroom time; limited learning time is often insufficient to cover all material in depth. By utilizing microlearning platforms, teachers can provide supplementary materials that learners can access independently outside of class hours. These materials can include short learning videos, vocabulary exercises, grammar exercises, or text comprehension exercises. Thus, the learning process takes place not only in the classroom but also sustainably through digital platforms (Zavodna et al., 2024). This allows learners to review learning materials according to their needs.

The use of microlearning can also support the application of the blended learning model in Arabic language learning. Blended learning is a learning model that combines face-to-face learning with digital technology-based learning (Ardiansyah et al., 2025). In this model, classroom learning can be focused on discussion activities, language practice, and interaction between teachers and students, while the delivery of basic materials can be done through microlearning platforms. This combination of face-to-face learning and digital learning allows for a more varied and effective learning experience. Students not only passively receive information, but also actively engage in various learning activities that encourage the development of language skills.

The utilization of microlearning also has important implications for the transformation of Arabic learning in the digital age. Microlearning helps reduce the cognitive burden of students by providing information in small, easy-to-digest chunks, which is crucial in online learning (Susilana et al., 2022). Students today are more accustomed to accessing information quickly through digital devices. Therefore, learning strategies that utilize digital technology, such as microlearning, are very relevant to answer learning needs in the digital era. From a pedagogical perspective, the use of microlearning also requires teachers to develop their digital competencies. Teachers no longer only play the role of conveyors of information, but also as facilitators who are able to design effective learning experiences through various digital media. Developing digital teaching competencies is essential for teachers to implement microlearning effectively (Betancur-Chicué & García-Valcárcel Muñoz-Repiso, 2023).

CONCLUSION

The findings of this study indicate that the use of microlearning platforms in Arabic language instruction falls within the "very good" category, with an average score of 86.17%, while the quality of learning supported by these platforms reaches 92.2%. These results suggest that microlearning is perceived positively by respondents as an effective digital learning approach that enhances flexibility, accessibility, and efficiency in the learning process. Furthermore, the integration of microlearning appears to contribute to improved material delivery, clearer understanding of linguistic concepts, and increased student motivation and engagement. Methodologically, these conclusions are grounded in a quantitative descriptive approach involving 37 Arabic language teachers from various madrasahs, using structured instruments to measure both the extent of microlearning utilization and its perceived impact on learning quality. This context is important in interpreting the findings, as respondents' professional backgrounds and teaching environments may influence their perceptions. Despite these promising results, this study is limited to perceptual data and short-term analysis. Therefore, future research is recommended to explore the long-term effects of microlearning, particularly on non-cognitive aspects such as student motivation, engagement, and learning autonomy, through longitudinal or follow-up studies. By incorporating broader methodological approaches and more diverse respondent backgrounds, future studies can provide a more comprehensive understanding of the role of microlearning in enhancing Arabic language education in madrasah contexts.

Overall, the results of this study show that the use of microlearning platforms makes a significant contribution to improving the quality of Arabic language learning. The findings of the frequency distribution dominated by the high category (59.9%) indicate that microlearning has been optimally utilized as a learning support medium by teachers. Therefore, microlearning can be seen as one of the relevant digital learning innovations in supporting the transformation of Arabic learning in the era of information technology. In the future, the use of microlearning platforms needs to continue to be developed through institutional support, improving teachers' digital competence, and further research that can examine its influence on various aspects of language learning more comprehensively.

REFERENCES

Al Shloul, T., Mazhar, T., Abbas, Q., Iqbal, M., Ghadi, Y. Y., Shahzad, T., Mallek, F., & Hamam, H. (2024). Role of activity-based learning and ChatGPT on students' performance in education. *Computers and Education: Artificial Intelligence*, *6*. https://doi.org/10.1016/j.caeai.2024.100219

Ardiansyah, A., Putra, M. S., Sudatha, I. G. W., Suatama, I. K., & Santosa, M. H. (2025). Artikel Review: Penerapan Model Pembelajaran Blended Learning Untuk Meningkatkan, Aksesibilitas, Fleksibilitas Serta Efektifitas Assessment Dan Evaluasi Pembelajaran Mahasiswa Di Era Digital 5.0. *Diksi: Jurnal Kajian Pendidikan Dan Sosial*, *6*(3), 366–377.

Arikunto, S. (2010). Metode peneltian. *Jakarta: Rineka Cipta*, *173*.

Arrafii, M. A. (2023). Unfolding the typology and quality of the learner agency practices in the teachers' implementation of the 2013 curriculum in Indonesia: the normalisation process theory perspective. *Asia Pacific Education Review*, *24*(4), 545–561. https://doi.org/10.1007/s12564-022-09806-0

Betancur-Chicué, V., & García-Valcárcel Muñoz-Repiso, A. (2023). Microlearning for the Development of Teachers' Digital Competence Related to Feedback and Decision Making. *Education Sciences*, *13*(7). https://doi.org/10.3390/educsci13070722

Bruck, P. A., Motiwalla, L., & Foerster, F. (2012). *Mobile learning with micro-content: a framework and evaluation*.

Çaldağ, M. T., Bayhan, N. A., & Yeloğlu, H. O. (2025). Environmental impact of digital education. In *Digital Innovation and Sustainability in Education* (pp. 27–43). https://doi.org/10.4337/9781035359561.00010

Chemsi, G., Naciri, A., Imadi, I. E., Sadiq, M., Benabid, A., & Radid, M. (2025). Student Engagement and Motivation in Video Microlearning Quizzes: A Quantitative Study Based on Learning Traces and Measurement Scale. In *Personalized Learning Through Adaptive Systems and Intelligent Tutoring* (pp. 99–114). IGI Global. https://doi.org/10.4018/979-8-3373-0740-4.ch003

Coccoli, M., Mercurio, M., Torre, I., & Torsani, S. (2011). Design of a framework for personalized microlearning. *Proceedings of the IADIS International Conference E-Learning 2011, Part of the IADIS Multi Conference on Computer Science and Information Systems 2011, MCCSIS 2011*, *2*, 171–175. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84865091284&partnerID=40&md5=9fb9ab5315afe13daa8d7aedd6b8b03b

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.)*. Thousand Oaks: SAGE Publications.

Dahal, N., Manandhar, N. K., Luitel, B. C., Pant, B. P., Shrestha, I. M., Rajbanshi, R., Dhungana, P., & Dhungana, S. (2023). REALITY OF E-LEARNING: SUCCESS AND FAILURE OF LEARNING MANAGEMENT SYSTEM. *ELearning and Software for Education Conference*, *1*, 321–327. https://doi.org/10.12753/2066-026X-23-029

Gao, S. (2025). Motivational Factors and Strategies in Language Learning: Perspectives From Military Language Learners. *Theory and Practice in Language Studies*, *15*(5), 1371–1381. https://doi.org/10.17507/tpls.1505.01

Ghoz Ali. (2011). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 19, Semarang: Badan Penerbit Universitas Diponegoro. Gibson. 2001. Organisasi Perilaku-Struktur-Proses, Terjemahan Agus Dharma. Edisi 5. Jakarta: Penerbit Erlangga Haryanto, Danny. 20. *E-Jurnal Manajemen Universitas Udayana*, *5*(9).

Giurgiu, L. (2017). Microlearning an evolving elearning trend. *Scientific Bulletin-Nicolae Balcescu Land Forces Academy*, *22*(1), 18–23.

Guvin Felcida, F. J., & Parameswaran, D. (2024). An Analytical Study on Developing Language Skills among L2 Learners Through Digital Teaching and Learning. *Traduction et Langues*, *23*(1), 88–107. https://doi.org/10.52919/translang.v23i1.971

Hassan, S., Baloch, H. Z., & Lina, A. (2024). Design and Development of Microlearning Content to Complement Skills Training in Learning. In *Advances in Science, Technology and Innovation: Vol. Part F2920* (pp. 191–201). Springer Nature. https://doi.org/10.1007/978-3-031-51244-5_21

Hug, T. (2005). *Microlearning: a new pedagogical challenge (introductory note)*. na.

Jack, K., Wilkinson, R., Hannan, E., & Hamshire, C. (2023). Birley Place: a digital community to enhance student learning. In *Digital Teaching, Learning and Assessment: the Way Forward* (pp. 99–119). https://doi.org/10.1016/B978-0-323-95500-3.00004-3

Jha, S., Jha, M., & Xu, J. (2024). Teaching and Learning in the Digital Era: Opportunities and Challenges. In *Teaching and Learning in the Digital Era: Issues and Studies* (pp. 51–85). https://doi.org/10.1142/9789811285622_0002

Kaewunruen, S. (2019). Enhancing railway engineering student engagement using interactive technology embedded with infotainment. *Education Sciences*, *9*(2). https://doi.org/10.3390/educsci9020136

Kayyali, M. (2025). The Digital Transformation of Education: Opportunities and Challenges for Communication. In *Effects of Education Communication in Digital Learning Environments* (pp. 433–471). https://doi.org/10.4018/979-8-3693-9067-2.ch014

Kohnke, L. (2023). Mobile Microlearning: Enhancing Listening, Speaking, Writing, and Reading Skills. In *Springer Briefs in Education* (pp. 23–41). https://doi.org/10.1007/978-981-99-2774-6_4

Kuntz, B. (2013). Using twitter, blogs and other web 2.0 technologies and internet resources to enhance arabic as a foreign-language reading skills. *Proceedings of the European Conference on E-Learning, ECEL*, 224–230. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84899570696&partnerID=40&md5=4662bcde3c73488f3797b188d8cb1aa5

Leong, K., Sung, A., Au, D., & Blanchard, C. (2021). A review of the trend of microlearning. *Journal of Work-Applied Management*, *13*(1), 88–102.

Madyatmadja, E. D. (2023). The Effectiveness of Learning Management System for University Students in Indonesia. *Proceedings of the 7th 2023 International Conference on New Media Studies, CONMEDIA 2023*, 88–93. https://doi.org/10.1109/CONMEDIA60526.2023.10428127

Makruf, I., & Barokah, A. (2023). Improving the Quality of ICT-Based Arabic Learning Assessment With Online Applications. *Journal of Higher Education Theory and Practice*, *23*(11), 32–40. https://doi.org/10.33423/jhetp.v23i11.6216

Moore, R. L., Hwang, W., & Moses, J. D. (2024). A systematic review of mobile-based microlearning in adult learner contexts. *Educational Technology and Society*, *27*(1), 137–146. https://doi.org/10.30191/ETS.202401_27(1).SP02

Salas-Díaz, F., & González-Bello, E. O. (2023). Profiles of Higher Education Students Adopting Microlearning Strategies. *Revista Electronica Educare*, *27*(2). https://doi.org/10.15359/REE.27-2.17196

Santosa, I., Iskandar, I., & Setiadi, S. (2025). Adapting Language Learning Materials for

Digital Native: Infusing CEFR Standards in English Procedural Texts on Microlearning Apps. *World Journal of English Language*, *15*(4), 171–183. https://doi.org/10.5430/wjel.v15n4p171

Shail, M. S. (2019). Using micro-learning on mobile applications to increase knowledge retention and work performance: a review of literature. *Cureus*, *11*(8).

Sozmen, E. Y. (2022). Perspective on pros and cons of microlearning in health education. *Essays in Biochemistry*, *66*(1), 39–44. https://doi.org/10.1042/EBC20210047

Sugiyono, S. (2017). Metode penelitian dan pengembangan untuk bidang pendidikan, manajemen, sosial, teknik: Research and development. *R&D. Alfabeta*.

Sumskaya, A. S. (2023). Media Generation of the "Digital Borderline" in the Information and Communication Area of the Digitalization Era. *Etnograficeskoe Obozrenie*, *2023*(5), 194–210. https://doi.org/10.31857/S0869541523050123

Susilana, R., Dewi, L., Rullyana, G., Hadiapurwa, A., & Khaerunnisa, N. (2022). Can microlearning strategy assist students' online learning? *Cakrawala Pendidikan*, *41*(2), 437–451. https://doi.org/10.21831/cp.v41i2.43387

Triana, A. J., White-Dzuro, C. G., Siktberg, J., Fowler, B. D., & Miller, B. (2021). Quiz-Based Microlearning at Scale: a Rapid Educational Response to COVID-19. *Medical Science Educator*, *31*(6), 1731–1733. https://doi.org/10.1007/s40670-021-01406-8

Tselykovskiy, A. A., Butin, A. V, & Musenova, M. A. (2025). Digital Transformation in Education and Science: Benefits, Risks, and Ways to Optimize. *Proceedings - 2025 5th International Conference on Technology Enhanced Learning in Higher Education, TELE 2025*, 176–178. https://doi.org/10.1109/TELE66816.2025.11212112

Wedi, A., & Mardiana, D. (2025). Digital Transformation Model of Islamic Religious Education in the AI Era: A Case Study of Madrasah Aliyah in East Java, Indonesia. *International Journal of Learning, Teaching and Educational Research*, *24*(8), 842–863. https://doi.org/10.26803/ijlter.24.8.37

Yadav, M., Kanwal, P., & Dang, T. T. (2025). Microlearning for the masses: Empowerment of geographically dispersed teams. In *Navigating the Global Workforce Through Bold Workplace Learning and Professional Development* (pp. 319–346). IGI Global. https://doi.org/10.4018/979-8-3693-3338-9.ch012

Yanovets, A., Bondar, T., Kozak, A., Knysh, T., Shevchuk, A., & Voitenko, I. (2025). Digital Transformations in Learning: New Approaches to Teaching Foreign Languages in the Modern Educational Environment. *Premier Journal of Science*, *13*. https://doi.org/10.70389/PJS.100098

Zavodna, M., Mrazova, M., Poruba, J., Javorcik, T., Guncaga, J., Havlaskova, T., Tran, D., & Kostolanyova, K. (2024). Microlearning: Innovative Digital Learning for Various Educational Contexts and Groups. *Proceedings of the European Conference on E-Learning, ECEL*, *23*(1), 442–450. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85215695968&partnerID=40&md5=40435361652cc691a2bf0e4696beb815

Zou, Y., Kuek, F., Feng, W., & Cheng, X. (2025). Digital learning in the 21st century: trends, challenges, and innovations in technology integration. *Frontiers in Education*, *10*. https://doi.org/10.3389/feduc.2025.1562391