BARAYA
Journal of Arabic and World Languages Education
Volume : 02 Issue : 01

DIGITAL GAMIFICATION PLATFORMS AND STRATEGIES IN ARABIC LANGUAGE LEARNING IN ELEMENTARY SCHOOLS: A SYSTEMATIC LITERATURE REVIEW

Siti Faizatul Ilma[1a], Hidayatus Safithry[2]
[1] Al-Falah As-Sunniyah University, Jember, Indonesia, 244486232044@uas.ac.id
[2] Kiai Haji Achmad Siddiq State Islamic University, Jember, Indonesia, hidayatussafithry@gmail.com

ABSTRACT

In today's digital age, technology is increasingly being integrated into education, including Arabic language instruction at the elementary school level. Various gaming platforms offer features that can facilitate learning and align with educational objectives. However, their implementation requires the right strategy to ensure effective use. Therefore, the objectives of this study are: first, to identify various digital gamification platforms that are effective in Arabic language instruction at the elementary school level. Second, to identify appropriate strategies for the use of digital gamification. Third, to identify the advantages and challenges of using digital gamification platforms in learning. This study employs a Systematic Literature Review (SLR) approach covering the period from 2025 to 2026. The search was conducted across three databases: Google Scholar, Google Books, and Sinta. By going through the stages of collecting, reviewing, and analyzing various studies related to digital gamification platforms and strategies in Arabic language learning at the elementary school level, the researcher was able to obtain more comprehensive information based on the results of previous studies. The review findings show that, first, the most commonly used platforms are Quizizz, Wordwall, Kahoot!, Blooket, Baamboozle, Educaplay, Duolingo, Memrise, and various other apps. Second, the strategies employed include selecting apps, aligning platforms with learning objectives, combining multiple platforms, tailoring activities to students' abilities, managing competition and collaboration, and ensuring teacher readiness and technological infrastructure. Third, the advantages of digital gamification include increasing student motivation, interest, and engagement; supporting the mastery of Arabic vocabulary and language skills; flexibility; personalization; and multisensory learning experiences. Meanwhile, the main challenges include gaps in infrastructure and access to technology, as well as teacher competence, learning management, and the potential impact of excessive technology use. This study makes a theoretical contribution to research on digital gamification platforms and strategies in Arabic language learning, as well as a practical contribution to designing more innovative and responsive Arabic language instruction tailored to the needs of elementary school students.

Keywords: Arabic, Digital Gamification Platforms, Strategies, Advantages and Challenges, Elementary School

[a] Corresponding author

PLATFORM DAN STRATEGI GAMIFIKASI DIGITAL DALAM PEMBELAJARAN BAHASA ARAB SEKOLAH DASAR: A SYSTEMATIC LITERATURE REVIEW

ABSTRAK

Di era digital saat ini, teknologi mulai merambat ke dalam pembelajaran termasuk dalam mata pelajaran Bahasa Arab di jenjang sekolah dasar. Berbagai platform game menyediakan fitur yang mampu mempermudah dan berjalan selaras dengan pembelajaran. Akan tetapi dalam pengimplementasiannya membutuhkan strategi yang tepat agar penggunaannya lebih efektif. Sehingga, tujuan dari penelitian ini adalah: pertama, mengetahui berbagai platform gamifikasi digital yang berfungsi dalam pembelajaran Bahasa Arab jenjang sekolah dasar. Kedua, strategi dari gamifikasi digital yang tepat dalam penggunaannya. Ketiga, kelebihan dan tantangan dari adanya platform gamifikasi digital dalam pembelajaran. Pendekatan dalam penelitian ini menggunakan *literature review* dengan jenis SLR (*Systematic Literature Review*) dalam rentang waktu 2025-2026. Pencarian dilakukan pada tiga basis data, yaitu Google Scholar, Google Book, dan Sinta. Dengan melewati tahap pengumpulan, menelaah, dan menganalisis berbagai penelitian yang berkaitan dengan platform dan strategi gamifikasi digital dalam pembelajaran Bahasa Arab jenjang sekolah dasar, menjadikan peneliti dapat memperoleh informasi yang lebih lengkap berdasarkan hasil penelitian yang telah dilakukan sebelumnya. Hasil review menunjukkan; pertama, platform yang sering digunakan yaitu Quizizz, Wordwall, Kahoot!, Blooket, Baamboozle, Educaplay, Duolingo, Memrise, dan berbagai aplikasi lainnya. Kedua, strategi yang digunakan yaitu pemilihan aplikasi, menyesuaikan platform dengan tujuan pembelajaran, mengkombinasikan beberapa platform, menyesuaikan aktivitas dengan kemampuan siswa, pengelolaan kompetisi dan kolaborasi, serta kesiapan guru dan fasilitas teknologi. Ketiga, kelebihan dari gamifikasi digital yaitu meningkatkan motivasi, minat, dan keterlibatan siswa, mendukung penguasaan kosakata dan keterampilan Bahasa Arab, fleksibilitas, personalisasi, dan pengalaman belajar multisensori. Sedangkan tantangan utama yang berupa kesenjangan infrastruktur dan akses teknologi, serta kompetensi guru, pengelolaan pembelajaran, dan potensi dampak penggunaan teknologi secara berlebihan. Penelitian ini memiliki kontribusi teoritis terhadap kajian mengenai platform dan strategi gamifikasi digital dalam pembelajaran Bahasa Arab, serta berkontribusi praktis dalam merancang pembelajaran yang lebih inovatif dan responsif dalam mata pelajaran Bahasa Arab terhadap kebutuhan siswa jenjang sekolah dasar.

Kata Kunci**:** Bahasa Arab, Platform Gamifikasi Digital, Strategi, Kelebihan dan Tantangan, Sekolah Dasar

A. INTRODUCTION

The digital age is marked by advanced technology that simplifies people's daily lives, all contained within a single device known as a cell phone (Carandang et al., 2024). Within it, there are many platforms that are very useful in facilitating daily life (Banafaa et al., 2023). One such area is education (Lyu et al., 2026), including Arabic language instruction at the elementary school level. Various game-based platforms serve as practical and engaging tools that greatly facilitate student learning; moreover, their flexible nature allows them to be accessed anywhere and anytime, thereby effectively enhancing students' Arabic language proficiency (Sapawi & Yusoff, 2025).

In several countries, digital gamification in Arabic language instruction has already extended to the elementary school level. In Malaysia, gamification has begun to be used as an approach to teaching Arabic that is considered aligned with 21st-century learning trends because it creates an

engaging and interactive learning environment. Malaysia employs gamified Arabic modules in elementary schools as an approach to enhance students' knowledge, motivation, achievement, and language skills (Jaafar & Yusoff, 2022). Meanwhile, in Saudi Arabia, the use of digital gamification through Blooket and Quizizz in Riyadh has shown an improvement in students' Arabic vocabulary, as well as a more positive attitude toward gamification (Mufleh & Inein, 2025).

In Indonesia itself, digital gamification in Arabic language learning has also reached the elementary school level (Naqib & Ubaidillah, 2025). The use of various platforms that aid in mastering Arabic during instruction demonstrates its significance for students' abilities, despite the perception that Arabic is a difficult language to learn and master, particularly at the elementary school level (Winata et al., 2025). Although its implementation requires adequate facilities, the use of digital gamification is made easier by the widespread availability and ownership of mobile devices among elementary school students' parents and even the students themselves. Consequently, learning becomes more accessible and is not limited solely to the school setting.

This is consistent with a study (Uluum et al., 2025) showing that digital gamification platforms can help increase student engagement in the learning process. A previous study by Midin (2025) also demonstrated that the use of digital gamification platforms has been shown to improve students' ability to recognize and use basic Arabic vocabulary, improve pronunciation, and foster high enthusiasm for learning. Similarly, a study by (Antony & Robbani, 2026) showed that digital gamification platforms are effective in increasing motivation, active participation, and mastery of Arabic vocabulary among elementary school students. However, there is a gap in the existing research. Research focusing on digital gamification platforms and their strategies for teaching Arabic at the elementary school level remains scarce. Furthermore, the integration of various platforms into a single component is also limited. The availability of a mapping of the various types of platforms used in elementary schools is also minimal.

Based on the background and gaps that have been identified, this study aims to: first, identify various digital gamification platforms that are effective in Arabic language learning at the elementary school level; second, determine the appropriate strategies for using digital gamification; and third, identify the advantages and challenges of using digital gamification platforms in learning. By focusing on these objectives, this study aims to identify the platforms, strategies, and the advantages and disadvantages of digital gamification in Arabic language learning for elementary school students. Through these various platforms and strategies, the findings enrich the literature on digital media in Arabic language learning at the elementary school level and can serve as a reference for designing more engaging Arabic language learning programs in elementary schools.

This study argues that the use of platforms in learning also requires effective strategies. In addition, it is necessary to understand the advantages and challenges of implementing these digital gamification platforms as a benchmark for teachers' ability to integrate them into learning in a way that is more effective and conducive to learning. Teachers need to understand the overall characteristics of their students so they can select platforms that are appropriate and aligned with students' needs. Nevertheless, this study is necessary to provide an overview of the platforms, strategies for targeted design, and the advantages and disadvantages as considerations aimed at ensuring that Arabic language learning for elementary school students proceeds appropriately and optimally.

B. METHODS

This study employs a literature review approach, specifically a Systematic Literature Review (SLR) (Kitchenham et al., 2009). This approach was chosen to collect, examine, and analyze various studies related to digital gamification platforms and strategies in Arabic language learning at the elementary school level. Through this method, the researcher can obtain more comprehensive information by drawing on previous studies.

The research process began by defining the research focus, specifically on digital gamification platforms and strategies in Arabic language learning at the elementary school level. Subsequently, the researcher conducted a search across three databases: Google Scholar, Sinta, and Google Books. The keywords used were: digital gamification platforms, digital gamification strategies, Arabic language learning, advantages and challenges, and elementary school. The selected articles were not only related to the research topic but were also published between 2025 and 2026; a total of 294 articles were identified, of which 27 were deemed relevant.

The selection of the articles obtained is illustrated in the following diagram:

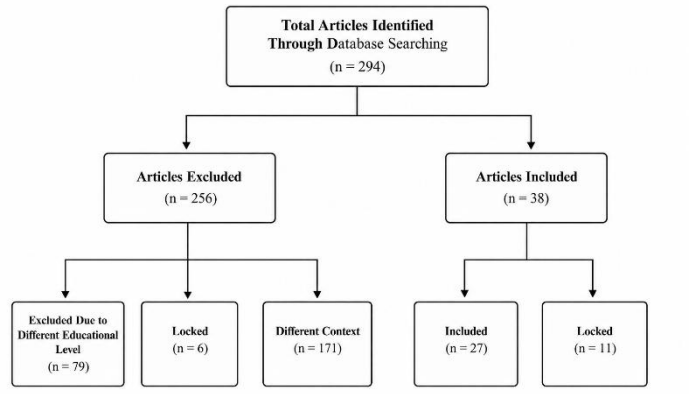


Figure 1. selection of the articles illustrated

The criteria for articles used in this study are as follows: first, they must contain a discussion relevant to the research topic; second, the articles must be available in full text; and third, they must come from reliable scientific sources. Articles that do not align with the research focus were not included in this study. After the article selection process was completed, the researcher read and analyzed each article to obtain information related to digital gamification platforms and strategies in Arabic language learning at the elementary school level. The results of the analyzed data will then be presented in the form of a description to provide a clear picture of digital gamification platforms and strategies in Arabic language learning at the elementary school level.

C. RESULTS

Of the 294 articles, 27 were relevant to the research topic. Based on the results of the analysis, the data presented in the following table were obtained.

Table 1. Analysis Results

Name	Title	Description
(Antony & Robbani, 2026)	Implementasi Media Pembelajaran Bahasa Arab Berbasis Gamifikasi Menggunakan Platform Quizizz/Wordwall Pada Kelas 4 di SDIT Arrahmah Jakarta	Gamification-based Arabic language learning materials that use the Quizizz and Wordwall platforms are effective in increasing elementary school students' motivation, active participation, and mastery of Arabic vocabulary.
(Naqib & Ubaidillah, 2025)	Inovasi Pembelajaran Bahasa Arab Berbasis Digital di Era Modern: Transformasi Metode, Media, dan Strategi Pembelajaran	Apps such as Quizizz, Kahoot!, and Canva, as well as e-learning platforms, consistently boost students' active participation, strengthen their competencies in listening, speaking, reading, and writing, and foster the development of soft skills such as digital literacy, communication, and teamwork.

		However, challenges remain in the areas of teacher readiness, infrastructure availability, and curriculum adaptation.
(Winata et al., 2025)	SISTEMATIK LITERATURE REVIEW: EFEKTIVITAS QUIZIZZ SEBAGAI ASESMEN PEMBELAJARAN BAHASA DI SEKOLAH DASAR BERBASIS GAMIFIKASI	The Quizizz platform significantly increases students' active participation, intrinsic and extrinsic motivation, and understanding of language course material, while also creating a more engaging and effective language learning environment-even though challenges related to technological readiness and teachers' competence in integrating gamification need to be addressed. Teachers should consider using Quizizz as an assessment tool in language instruction to boost student engagement and motivation. Adjusting the difficulty level and selecting relevant content are also crucial to ensuring that all students can participate effectively. Additionally, improving the technological infrastructure in schools will help reduce the barriers students may face when using gamification-based learning tools.
(Aisyah & Syafe'i, 2026)	Analisis Kualitatif terhadap Penggunaan Media Digital Wordwall dalam Pembelajaran Bahasa Arab	The use of Wordwall can enhance classroom interaction, learning motivation, and vocabulary retention through repeated practice, healthy competition, and real-time feedback. Student responses have been very positive, as Wordwall is considered fun, makes memorization easier, and boosts verbal confidence. Although there have been technical and managerial challenges, the teachers' adaptive strategies have ensured that implementation remains effective and sustainable. The strategies employed include: on the technical side, teachers optimize the "printable game" feature so that Wordwall could still be used in an offline format without altering the content or essence of the learning when the internet connection was unstable; forming groups as a collaborative tool; and overcoming the limitations of the free version by integrating Wordwall with other digital platforms such as Quizizz, Liveworksheet, or Kahoot so that gamification remained dynamic. From a pedagogical perspective, there is a need for enhanced teacher training. From a psychological perspective, teachers can shift the focus of the game

		from student-versus-student competition to personal achievement by setting individual target scores and providing verbal praise to normalize mistakes as part of the learning process during implementation. Meanwhile, in terms of time management, teachers need to add to or modify the vocabulary list each week based on learning outcomes and integrate Wordwall with the digital Lesson Plan (RPP).
(Hukom, 2026a)	Gamifikasi dan Game-Based Learning dalam Pembelajaran Bahasa Arab: A Scoping Review	The Kahoot!, Quizizz, Wordwall, and Duolingo platforms have a positive impact on students' motivation, engagement, and academic achievement, particularly in their mastery of Arabic vocabulary and grammar.
(Uluum et al., 2025)	Pendidikan Bahasa Arab untuk Generasi Z: Strategi Adaptasi Pengajaran di Era Digital	The Duolingo and Kahoot platforms can help increase student engagement in the learning process. However, there are challenges in the form of disparities in access to technological devices and the internet, particularly in areas with limited digital infrastructure. In addition, a lack of digital literacy among educators poses an obstacle to the implementation of technology-based methods. Strategies to address this include accounting for variations in digital access, implementing comprehensive professional development programs for teachers, and designing locally relevant content aligned with the potential of digital innovation. Furthermore, a smart blended learning approach-combining face-to-face interaction with the flexibility of digital learning-and ongoing evaluation of strategies to make appropriate adjustments are necessary.
(Fuadi & Nurmala, 2025)	Strategi Pengembangan Buku Digital Interaktif Bahasa Arab Berbasis Lumi Education	The Lumi Education platform has been proven to make learning more effective and meaningful, and has been shown to support comprehensive mastery of Arabic language skills through varied and user-friendly H5P content. The implementation strategy includes an integrative approach-combining language skills with digital literacy and character values a contextual approach-linking the material to students' real lives and an adaptive approach-tailoring content to individual learning styles and abilities.

(Al-Khasy & Faris, 2025)	Inovasi Media Pembelajaran Digital dalam Peningkatan Penguasaan Mufradat Bahasa Arab: Sebuah Kajian Literatur	Platforms such as Duolingo Arabic, Memrise, Drops Arabic, as well as custom apps developed by researchers-such as Mufradat Quest and Arabic Master-have been shown to significantly improve students' vocabulary mastery and demonstrate high effectiveness, influenced by interface design, interactive features, alignment with learning theories, and integration with the curriculum. However, there are also challenges in their implementation, including limitations in technological infrastructure, educators' digital competencies, and development costs.
(Hukom, 2026b)	Transformasi Digital Pembelajaran Bahasa Arab: Tinjauan Literatur Sistematis terhadap Pemanfaatan Teknologi dari Aplikasi Seluler hingga Kecerdasan Buatan	The Quizizz platform has been shown to improve students' vocabulary mastery, understanding of language structure, motivation, and engagement in learning. However, the integration of technology is still limited by infrastructure, teacher readiness and competence, and the need for pedagogical support.
(Midin, 2025)	Persepsi Siswa Terhadap Pemanfaatan *Duolingo* Sebagai Media Peningkatan Kemampuan Bahasa Arab di Sekolah Dasar Negeri 2 Medana Kabupaten Lombok Utara	The Duolingo platform can significantly increase students' interest, motivation, and engagement in the learning process. Students demonstrated improved ability to recognize and use basic Arabic vocabulary, corrected their pronunciation, and showed high enthusiasm for learning. Duolingo's gamification approach-such as its level system, points, and rewards-proved effective in maintaining students' enthusiasm for learning. The native speaker audio feature and the distance-based repetition algorithm also facilitate a more personalized and sustainable learning experience. However, the study also identified several challenges, such as limited access to digital devices, uneven internet connectivity, and a lack of teacher training in optimizing the use of technology.
(Muzakki et al., 2025)	TRANSFORMASI PEMBELAJARAN BAHASA ARAB DI ERA DIGITAL: ANTARA INOVASI TEKNOLOGI DAN TANTANGAN PENERAPAN	Platforms such as Duolingo, Kahoot!, Quizlet, and Canva can foster students' interest in learning, accelerate the acquisition of language skills, and support the implementation of more dynamic, creative, and contextual learning methods. However, challenges

		remain in the form of infrastructure limitations, low digital literacy among some teachers, and the digital divide between urban and rural areas.
(Safitri & Wahdah, 2026)	Penerapan Media Pembelajaran Bahasa Arab Berbasis Teknologi	Platforms such as Duolingo, Memrise, and Rosetta Stone offer a variety of interactive features, such as progressively structured vocabulary, grammar, and pronunciation exercises. These platforms have been shown to boost students' motivation to learn, provide an engaging learning experience, and facilitate access to learning materials anytime and anywhere. However, limited technological infrastructure in some regions, a lack of technical skills among educators, and the high costs of developing and maintaining technology-based learning materials pose significant challenges. The necessary strategies include investing in teacher training, infrastructure development, and the provision of affordable technological devices.
(Nur et al., 2026)	Media Pembelajaran Digital Berbasis Aplikasi Android Dalam Pembelajaran Kosakata Bahasa Arab	The Quizlet, Kahoot!, and Quizizz platforms contribute positively to the cognitive, affective, and practical aspects of students' Arabic vocabulary learning. In terms of the cognitive aspect, the higher a student's cognitive abilities, the greater their ability to absorb and use the language. From an affective perspective, these platforms have a significant impact on students' motivation to learn and increase their interest in learning. Meanwhile, from a practical standpoint, these platforms are not only user-friendly but also make learning more interactive and engaging.
(Ismahani & Hasan, 2026)	IMPLEMENTASI MEDIA ICT UNTUK PEMBELAJARAN BAHASA ARAB STUDI KASUS KELAS IV SD ISLAM AL-AZHAR 75 SRAGEN	The Wordwall platform has been shown to boost student motivation, focus, and comprehension, and to facilitate more active interaction between teachers and students. However, there are challenges in its implementation; in addition to insufficient teacher competence, these challenges also depend on the school's readiness for technology-based learning.
(Al-AM et al., 2026)	PENDEKATAN MULTISENSORI DALAM PENGGUNAAN MEDIA	The Wordwall platform, designed to combine visual (engaging images), auditory (the pronunciation of Arabic

	WORDWALL: STUDI KUALITATIF TENTANG MOTIVASI BELAJAR BAHASA ARAB SISWA KELAS 1 DI SD IT AL MUBAROK	words), and kinesthetic (touching the screen and selecting answers) elements, has proven effective in increasing student attention, building enthusiasm for learning, and encouraging active participation in the classroom. In addition, Wordwall can help teachers deliver material in a more interactive and enjoyable way.
(Aza et al., 2025)	The Use of Gamification in Arabic Vocabulary Learning: A Literature Study	The Kahoot!, Wayground, Wordwall, and Educaplay platforms have been shown to have a positive impact on student motivation, engagement, and retention in Arabic vocabulary learning. Wordwall is effective for the vocabulary introduction stage through interactive activities. Wayground (Quizizz) supports repeated practice and memory reinforcement through its repetition feature. Kahoot! is well-suited for formative assessment because it incorporates elements of competition and immediate feedback. Educaplay is ideal as an enrichment tool that reinforces students' understanding of vocabulary meanings. A recommended strategy is to combine various platforms according to students' needs and characteristics to optimize learning outcomes.
(Fadila et al., 2025)	Literature Review: Aplikasi Mobile Fun Easy Learn Arabic dalam Pembelajaran Kosakata Bahasa Arab	The Fun Easy Learn Arabic platform has been proven to improve Arabic language skills. Through a combination of visual, audio, and kinesthetic elements in an in-depth multisensory approach, it makes learning both enjoyable and well-organized. Additionally, it enhances students' memory through the principles of spaced repetition and dual coding. This platform also boosts students' motivation to learn Arabic and is effective for self-directed learning, though it lacks interactive experiences in a conversational context.
(Septiana & Jauhari, 2025)	PEMANFAATAN MEDIA INTERAKTIF FROGGY JUMPS UNTUK MENINGKATKAN PENGUASAAN KOSAKATA BAHASA ARAB SISWA SDI SURYA BUANA MALANG	The Froggy Jumps platform has proven effective in improving students' vocabulary mastery, motivation, and active engagement, as well as facilitating vocabulary comprehension and retention through visual, audio, and interactive game features tailored to students' characteristics.

(NAVISAH, 2026)	Efektivitas media interaktif baamboozle dalam meningkatkan minat belajar bahasa arab siswa	The Baamboozle platform qualifies as an audiovisual and multimedia resource that supports active learning through gamification, healthy competition, emotional stimulation, and interactions that encourage student participation. Although there are limitations-such as access to technology or teacher readiness-the opportunities for implementation remain wide open.
(Alim et al., 2026)	Integrating Traditional and Modern Methods to Optimize Arabic Language Learning for Generation Alpha	The Duolingo and Memrise platforms show an improvement in students' Arabic language skills, particularly in receptive skills (listening and reading). Students can access the materials anytime and anywhere, making learning more flexible. In addition, the use of gamification has been shown to increase learning motivation because students feel more challenged and actively engaged in the learning process. In the productive aspects (speaking and writing), a positive impact is evident, namely a tangible improvement in students' communication skills. The advantages include its flexible and adaptive nature, as well as its alignment with the learning styles of the digital generation, making Arabic language learning more interactive and enjoyable. However, digital learning can lead to high levels of dependence among students, negatively impact their concentration, and pose a barrier for students who lack adequate access to technological resources.
(Asfihani et al., 2025)	Pemanfaatan Teknologi Digital dalam Pembelajaran Bahasa Arab: Kajian Literatur Terhadap Aplikasi dan Platform	Platforms like Duolingo, Memrise, and Mondly offer a more flexible, personalized, and engaging learning approach for beginners through intermediate learners. All three emphasize vocabulary practice, listening skills, and understanding simple sentence structures through user-friendly interface designs. Duolingo is effective as a motivating introduction that helps build study habits; Mondly makes the learning experience feel more realistic and immersive; and Memrise helps improve students' long-term vocabulary retention.
(Fuada et al., 2025)	Trends of Gamification Tools in Teaching Arabic in the Era	Platforms such as Memrise, Duolingo, Quizizz, and Kahoot offer innovative and engaging learning approaches and have

	of Globalization: A Literature Review Study	great potential to improve the quality of Arabic language learning. These platforms have been shown to make learning more interactive, increase student engagement and motivation, and make learning Arabic more enjoyable.
(Abdurahman et al., 2025)	Peluang dan Hambatan Digital dalam Pembelajaran Bahasa Arab : Prespektif Guru dan Mahasiswa	Opportunities: increasingly widespread use of learning resources; more innovative, engaging, and communicative learning; access to global networks and language collaboration; platforms for language practice; and opportunities to assess language proficiency and engage in online interaction using gadgets and laptops. Challenges: lack of proficiency in using digital technology.
(Nazhifa, 2025)	TRANSFORMASI PENDIDIKAN ERA DIGITAL: TANTANGAN DAN PELUANG BAGI GURU BAHASA ARAB MASA KINI	Platforms like Duolingo, Memrise, or Babbel make learning Arabic an interactive and enjoyable experience. The challenges teachers face in this era include the need for greater effort, more complex changes in the teacher's role, technological proficiency, infrastructure limitations, and the ability to adapt. However, there are also opportunities, such as more engaging and interactive learning, improved students' speaking skills, personalized learning, immediate feedback from teachers, and a modern and effective Arabic language learning experience.
(F. Nugrahani et al., 2026)	TANTANGAN DAN STRATEGI GURU SEKOLAH DASAR DALAM PENGAJARAN BAHASA DI ERA DIGITAL	The main challenges faced by elementary school teachers in language instruction in the digital age include limited technological skills, low student concentration due to the use of mobile devices, and a lack of facilities to support digital learning. The strategies implemented by teachers include the use of interactive learning media, the use of educational digital applications, and the implementation of collaborative learning methods that actively engage students.
(Zahro & Traf, 2026)	Students' Perceptions of Using Blooket for Arabic Learning in Elementary School	The use of Blooket can make Arabic language learning more interactive, engaging, and tailored to the characteristics of elementary school students. Student engagement is reflected in their active participation during the game, their attention to the questions, and

		their interactions throughout the learning process. In addition, students expressed positive views on the use of Blooket because they found the learning activities more enjoyable, less monotonous, and easier to understand. Gamification elements such as points, leaderboards, and interactive games can boost students' enthusiasm and focus during the learning process.
(Zaki, 2025)	Enhancing Arabic Vocabulary Mastery through Kahoot: Evidence from Elementary Madrasah Students	The Kahoot! platform positively and significantly improves students' mastery of Arabic vocabulary. The platform has also proven effective in increasing students' enthusiasm and active participation in learning.

D. DISCUSSION

Digital Gamification Platforms in Arabic Language Learning

Based on the review findings, the digital gamification platforms used in Arabic language learning demonstrate diversity, ranging from quiz apps and interactive games to language-learning apps. A study (Antony & Robbani, 2026) found that Quizizz and Wordwall were proven effective in increasing motivation, active participation, and vocabulary mastery among elementary school students. These findings are supported by (Winata et al., 2025), who demonstrated that Quizizz, Kahoot!, Canva, and e-learning platforms can increase active participation and support the skills of istima', kalam, qira'ah, and kitabah. Theoretically, the use of points, challenges, feedback, and interactive activities on these platforms aligns with Deterding et al.'s concept of gamification-the use of game design elements in non-game contexts to enhance user engagement (Deterding et al., 2011).

Based on the review data, Quizizz emerged as one of the most frequently cited platforms. A study (Winata et al., 2025) demonstrated the effectiveness of using this platform in increasing student participation and motivation to learn, while another study (Hukom, 2026b) found that Quizizz supports vocabulary mastery, understanding of language structure, and increases student motivation and engagement in learning. Research (Nur et al., 2026) also identifies the Quizizz, Quizlet, and Kahoot! platforms as tools that contribute to cognitive, affective, and practical aspects of Arabic vocabulary learning. Meanwhile, (Aza et al., 2025) explains that Wayground or Quizizz is more suitable for repetitive practice and memory reinforcement. This pattern aligns with Deci and Ryan's Self-Determination Theory, as quiz activities that provide feedback and opportunities to achieve goals support students' needs for competence and engagement in learning (Ryan & Deci, 2000).

In addition, the Wordwall platform has also made its mark in Arabic language learning in elementary schools. A study (Aisyah & Syafe'i, 2026) showed that Wordwall can enhance classroom interaction, motivation, vocabulary retention, and verbal confidence through repetitive practice, healthy competition, and immediate feedback. A study by (Ismahani & Hasan, 2026) also found that this platform increases student motivation, focus, and comprehension, while a study by (Al-AM et al., 2026) showed that the multisensory approach-using images, pronunciation audio, and answer-selection activities in Wordwall-can enhance student attention and participation. Thus, Wordwall is not merely a game but also a medium that connects visual and auditory stimuli with students' response activities. This aligns with Mayer's theory of multimedia learning, which posits that the use of multiple representations of information can aid

the comprehension process when designed in accordance with students' cognitive capacities (Mayer, 2009).

In addition to Quizizz and Wordwall, other game-based platforms used include Kahoot!, Blooket, Baamboozle, Educaplay, and Froggy Jumps. A study (Aza et al., 2025) showed that Kahoot! is effective for formative assessment because it combines competition and immediate feedback, while Educaplay can be used as a tool for vocabulary enrichment. A study by Zaki (2025) also found that Blooket has been shown to increase student enthusiasm, focus, and participation through points, leaderboards, and interactive games. (NAVISAH, 2026) also demonstrated that Baamboozle can support active learning through healthy competition and student interaction, while (Septiana & Jauhari, 2025) found that Froggy Jumps can aid in vocabulary mastery and retention through visual, audio, and game-based elements. These findings indicate that the selection of a platform must be tailored to learning objectives, rather than based solely on the app's popularity.

Several other platforms identified include language-learning apps such as Duolingo, Memrise, Drops Arabic, Fun Easy Learn Arabic, Mondly, and Rosetta Stone. A study (Midin, 2025) found that Duolingo was proven to enhance students' interest, motivation, engagement, vocabulary, and pronunciation through the app's levels, points, rewards, native speaker audio, and scheduled review sessions. A study (Al-Khasy & Faris, 2025) demonstrated the effectiveness of Duolingo Arabic, Memrise, Drops Arabic, and apps such as Mufradat Quest and Arabic Master, which were shown to improve students' vocabulary mastery. (Fadila et al., 2025) added that Fun Easy Learn Arabic can support learning through a multisensory approach, scheduled repetition, and dual coding. Furthermore, (Asfihani et al., 2025) also indicate that Duolingo, Memrise, and Mondly provide flexible and personalized experiences, while (Safitri & Wahdah, 2026) found Rosetta Stone to be a platform that offers progressive vocabulary, grammar, and pronunciation exercises and has proven to be effective. Thus, digital gamification platforms for Arabic language learning can be categorized into competitive quizzes, interactive games, and adaptive learning applications.

Strategies for Using Digital Gamification in Arabic Language Learning

To ensure the effective use of digital gamification, several strategies must be implemented. The first strategy employed in various studies is to tailor the platform to the learning objectives and content. For example, (Aza et al., 2025) recommend using Wordwall for vocabulary introduction, Quizizz for practice and memory reinforcement, Kahoot! for formative assessment, and Educaplay for enrichment. (Antony & Robbani, 2026) demonstrated the use of Quizizz and Wordwall to improve vocabulary mastery, while (Zaki, 2025) showed the positive impact of Kahoot! on vocabulary mastery among elementary madrasah students. This strategy aligns with the principle of instructional alignment regarding the consistency between learning objectives, activities, media, and assessment (Cohen, 1987). Therefore, gamification here should not be positioned as a learning objective but rather as a means to achieve specific Arabic language competencies.

The next strategy is to combine several platforms and types of activities so that the learning experience does not become monotonous. (Aisyah & Syafe'i, 2026) show that the limitations of the free version of Wordwall can be overcome by combining it with Quizizz, Liveworksheet, or Kahoot!. (Aza et al., 2025) also emphasizes the use of a combination of platforms based on their respective functions. The study by (Fuadi & Nurmala, 2025), although focused on Lumi Education and H5P content, demonstrates an integrative strategy through the combination of language skills, digital literacy, and character education. This strategy aligns with Kapp's gamification theory, which positions games as part of a structured learning experience rather than merely as a means of providing rewards or fostering competition (Kapp, 2012). Consequently, the variety of student activities must remain focused on achieving Arabic language learning competencies.

The third strategy employed is adaptation to students' characteristics and abilities. (Uluum et al., 2025) emphasize the importance of considering variations in digital access, teacher professional development, local content, blended learning, and ongoing assessment. (Fuadi & Nurmala, 2025) also highlight adaptive strategies by tailoring content to individual learning styles and abilities and connecting the material to students' real lives. (Midin, 2025) further notes that Duolingo features such as levels, points, audio, and repetition can provide a more personalized learning experience. From a social constructivist perspective (Vygotsky, 1978), these strategies enable teachers to provide support or scaffolding tailored to students' needs, ensuring that technology does not replace the teacher's role but rather reinforces the learning support process.

The fourth strategy implemented is managing the psychological and social aspects of the game. A study (Aisyah & Syafe'i, 2026) shows that competition in Wordwall can be shifted from a "student-versus-student" orientation to personal achievement by setting individual score targets and providing verbal praise. This strategy is important because overly intense competition can cause some students to focus more on winning than on the learning process. Conversely, recognition of individual progress can strengthen intrinsic motivation, as explained in Self-Determination Theory (Ryan & Deci, 2000). Collaborative strategies were also identified in the study through group formation, while (F. Nugrahani et al., 2026) highlights the emphasis on the use of interactive media, educational apps, and collaborative learning as strategies employed by elementary school teachers in the digital age.

In addition, another strategy is to prepare supportive conditions and technical alternatives. (Aisyah & Syafe'i, 2026) demonstrate the use of Wordwall's printable game features in learning so that instruction can continue even when the internet connection is unstable. In (Uluum et al., 2025), (Safitri & Wahdah, 2026), and (Abdurahman et al., 2025), the authors emphasize the need to improve teacher competencies and digital infrastructure. (Zahro & Traf, 2026) also indicate that the use of Blooket can increase student engagement, but its effectiveness still depends on the readiness of the available technology. Thus, effective gamification strategies involve not only the selection of applications but also include instructional planning, teachers' digital competencies, facility readiness, alternatives when technology fails, and evaluation of the results of its use.

Advantages and Challenges of Using Digital Gamification in Arabic Language Learning

Based on the results of the review, both advantages and challenges in its use were identified. The main advantage of digital gamification is that it increases student motivation, interest, and engagement. As research by (Antony & Robbani, 2026), (Winata et al., 2025), (Hukom, 2026a), and (Zahro & Traf, 2026) consistently shows, platforms such as Quizizz, Kahoot!, Wordwall, and Blooket are capable of making students more active and interested in participating in learning. Furthermore, (Midin, 2025) indicates that the level system, points, rewards, audio, and repetition features on Duolingo can sustain students' motivation to learn. These findings align with Self-Determination Theory, which posits that the need for competence arises when students receive feedback, overcome challenges, and observe their learning progress (Ryan & Deci, 2000). Thus, gamification has the potential to transform Arabic language learning from an activity perceived as monotonous into a more engaging and participatory experience.

Another advantage is that it supports vocabulary acquisition and Arabic language skills. (Aza et al., 2025) demonstrated improved vocabulary retention through Wordwall, Quizizz, Kahoot!, and Educaplay, consistent with (Zaki, 2025), who found improved vocabulary acquisition through Kahoot!. (Al-Khasy & Faris, 2025) reported on the effectiveness of Duolingo Arabic, Memrise, Drops Arabic, Mufradat Quest, and Arabic Master in vocabulary acquisition. (Fuada et al., 2025) also demonstrated that Duolingo, Memrise, and Mondly support vocabulary, listening skills, and simple sentence structures. Furthermore, (Winata et al., 2025) indicate that digital technology can also support listening, speaking, reading, and writing. These findings suggest that the benefits of gamification are not limited to motivational aspects but can also be directed toward students' cognitive achievements and language skills.

Other advantages include flexibility, personalization, and a multisensory learning experience. Midin (2025) notes that Duolingo provides audio and spaced repetition that support personalized and sustained learning. Similarly, (Fadila et al., 2025) demonstrate that Fun Easy Learn Arabic can combine visual, auditory, and kinesthetic elements along with the principles of dual coding and scheduled repetition. (Al-AM et al., 2026) also show that the combination of images, sounds, and interactive activities on Wordwall can increase students' attention and enthusiasm. Furthermore, (Alim et al., 2026) indicate that Duolingo and Memrise offer the flexibility to learn anytime and anywhere, aligning with the characteristics of the digital generation. These findings are supported by Mayer's Multimedia Learning theory, which suggests that a well-designed combination of verbal and visual representations can help students build more meaningful understanding (Mayer, 2009).

On the other hand, there are major challenges in the form of infrastructure gaps and limited access to technology. In (Uluum et al., 2025), (Midin, 2025), (Muzakki et al., 2025), (Safitri & Wahdah, 2026), and (Abdurahman et al., 2025) all indicate that limitations in devices, internet access, and infrastructure act as barriers to the implementation of digital learning. (Alim et al., 2026) also identifies dependence on technological facilities as one of the issues, while the study further shows that students without adequate access are at risk of falling behind. These challenges indicate that the effectiveness of gamification is determined not only by the quality of the application but also by the conditions of the digital ecosystem in which learning takes place. Therefore, the implementation of gamification must consider the principle of accessibility and provide offline alternatives, such as the printable game strategy demonstrated by (Aisyah & Syafe'i, 2026).

The next challenges relate to teacher competence, learning management, and the potential impact of excessive technology use. In (Uluum et al., 2025), (Ismahani & Hasan, 2026), (Safitri & Wahdah, 2026), (Abdurahman et al., 2025), and (W. F. Nugrahani & Abduh, 2025), the authors emphasize the importance of improving teachers' digital competencies. (Aisyah & Syafe'i, 2026) further highlight issues related to platform version limitations, time management, and the need for integration with instructional planning. (Alim et al., 2026) also warn of the potential for technology dependence and a decline in student concentration if digital use is not properly regulated. Meanwhile, (Abdurahman et al., 2025) indicate that digital opportunities-such as innovative, communicative, and engaging learning-continue to face barriers related to technological proficiency. Thus, the overall findings suggest that digital gamification is most effective when used as a teacher-controlled pedagogical strategy, rather than merely as the use of game applications.

Significance of the Research

These findings contribute both theoretically and practically to the development of Arabic language learning for elementary school students. Theoretically, these findings expand the body of research and understanding regarding the use of digital gamification in Arabic language learning, particularly at the elementary school level. Practically, these findings provide guidance for Arabic teachers in designing more innovative and responsive lessons by selecting platforms based on learning objectives and mapping out the platforms, usage strategies, benefits, and challenges of digital gamification in Arabic language learning. This mapping can serve as a foundation for future research to develop gamification designs that are more targeted, contextual, adaptive, and tailored to the characteristics of elementary school students.

Limitations of the Study

This study has limitations regarding the diversity of the characteristics of the articles analyzed. Based on the available data, the approaches and contexts of each article vary, making it impossible to directly compare the research results in terms of the same measure of effectiveness. Additionally, variations in gamification platforms and concepts, the context of implementation—

which is not yet fully uniform—the limited understanding of the long-term impact of digital gamification, and external impacts have not been fully examined. Therefore, it is hoped that future researchers will examine student characteristics, conduct longitudinal studies, and conduct more specific tests regarding teacher readiness, access to technology, game design, and learning objectives in determining the effectiveness of digital gamification in Arabic language learning.

E. CONCLUSIONS

Based on the review findings, digital gamification in Arabic language learning at the elementary school level has been implemented through various platforms, including quiz apps, interactive games, and language-learning apps. The platforms used include Quizizz, Wordwall, Kahoot!, Blooket, Baamboozle, Educaplay, Duolingo, Memrise, and various other apps. Each platform has different characteristics and functions, so their use must be tailored to the learning objectives, content, and student characteristics.

Strategies for using digital gamification focus not only on app selection but also on aligning platforms with learning objectives, combining multiple platforms, adapting activities to students' abilities, managing competition and collaboration, and ensuring teacher readiness and technological infrastructure. In general, digital gamification offers benefits in enhancing students' motivation, interest, participation, vocabulary mastery, and Arabic language skills. However, its implementation still faces challenges such as limited access to devices and the internet, teachers' digital competence, time management, and the potential for students to become overly reliant on technology.

Overall, the study's findings indicate that digital gamification has great potential to create a more interactive, flexible, multisensory, and student-centered Arabic language learning experience. Its effectiveness depends heavily on the alignment of the gamification design with learning objectives, teachers' ability to manage technology, and the support provided by the learning environment. Therefore, the implementation of gamification must be planned and adaptive so that the game elements continue to support the achievement of Arabic language competencies and do not divert from the primary learning objectives.

Future research is recommended to develop more empirical studies by comparing the effectiveness of various digital gamification platforms based on different types of Arabic language skills, grade levels, student characteristics, and school contexts. Research could also test the use of combinations of multiple platforms and compare gamification-based learning with conventional learning in a more measurable way. In addition, future studies need to consider the sustainability of gamification use, teachers' digital readiness and competencies, technology access gaps, and the long-term impact on student motivation and learning outcomes to develop a digital gamification implementation model that is more adaptive, inclusive, and aligned with the needs of Arabic language learning in elementary schools.

F. FUNDING

This research received no external funding, all research was funded by the author personally.

G. CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

H. ACKNOWLEDGMENTS

The author would like to express gratitude to all those who have supported and contributed to this research throughout its course. The author acknowledges that this article still has limitations. Therefore, constructive suggestions and criticism are greatly appreciated as a basis for future improvements. It is the author's sincere hope that this article will be useful in improving the quality of education, particularly in the area of digital-based learning innovations.

I. REFERENCES

Abdurahman, A., Budiarti, A. T., Nisa, K., & Nasution, S. (2025). Peluang dan Hambatan Digital dalam Pembelajaran Bahasa Arab : Prespektif Guru dan Mahasiswa. *Karakter : Jurnal Riset Ilmu Pendidikan Islam,* *2*(2), 322–335. https://doi.org/https://doi.org/10.61132/karakter.v2i2.625

Aisyah, N., & Syafe'i, I. (2026). Analisis Kualitatif terhadap Penggunaan Media Digital Wordwall dalam Pembelajaran Bahasa Arab. *ARABIA: Jurnal Pendidikan Bahasa Arab*, *4*(1), 15–32. https://jurnal.iaibafa.ac.id/index.php/Arabia/article/download/4206/828/10418

Al-AM, M. R., Rahmawati, E., & Afan, S. (2026). PENDEKATAN MULTISENSORI DALAM PENGGUNAAN MEDIA WORDWALL: STUDI KUALITATIF TENTANG MOTIVASI BELAJAR BAHASA ARAB SISWA KELAS 1 DI SD IT AL MUBAROK. *Al Hikmah: Jurnal Tarbiyah Dan Ilmu Keguruan*, *6*(1), 35–43. https://journal.badrussholeh.ac.id/index.php/Al-Hikmah/article/view/591

Al-Khasy, M. A. Q., & Faris, A. (2025). Inovasi Media Pembelajaran Digital dalam Peningkatan Penguasaan Mufradat Bahasa Arab: Sebuah Kajian Literatur. *JPIK :JURNAL PEMIKIRAN DAN ILMU KEISLAMAN*, *8*(2), 399–435. https://journal.ua.ac.id/index.php/jpik/article/view/1100/508

Alim, A. B., Latif, R., Amin, F., & Setiyadi, A. C. (2026). Integrating Traditional and Modern Methods to Optimize Arabic Language Learning for Generation Alpha. *Community: Jurnal Hasil Penelitian Dan Pengabdian Masyarakat*, *5*(1), 364–385. https://doi.org/https://doi.org/10.61166/community.v5i1.154

Antony, J., & Robbani, A. A. (2026). Implementasi Media Pembelajaran Bahasa Arab Berbasis Gamifikasi Menggunakan Platform Quizizz/Wordwall Pada Kelas 4 di SDIT Arrahmah Jakarta. *Jurnal Ilmu Pendidikan Dan Sosial*, *5*(2), 668–675. https://doi.org/https://doi.org/10.58540/jipsi.v5i2.1938

Asfihani, M. L., Anshori, A. Z. Al, Hafidz, M., & Efendi, A. (2025). Pemanfaatan Teknologi Digital dalam Pembelajaran Bahasa Arab: Kajian Literatur Terhadap Aplikasi dan Platform. *AL WARAQAHJURNAL PENDIDIKAN BAHASA ARAB*, *6*(2), 254–269. https://doi.org/https://doi.org/10.30863/awrq.v6i2.9975

Aza, F. H., Renata, Y. T., & Faiqoh, P. K. (2025). The Use of Gamification in Arabic Vocabulary Learning: A Literature Study. *Proceeding International Conference on Education*, 1039–1049. https://jurnalfaktarbiyah.iainkediri.ac.id/index.php/proceedings/article/view/6751

Banafaa, M., Shayea, I., Din, J., Azmi, M. H., Alashbi, A., Daradkeh, Y. I., & Alhammadi, A. (2023). 6G Mobile Communication Technology: Requirements, Targets, Applications, Challenges, Advantages, and Opportunities. *Alexandria Engineering Journal*, *64*, 245–274. https://doi.org/https://doi.org/10.1016/j.aej.2022.08.017

Carandang, R. R., Ancheta, Y. M., Beleno, G., Gonzales, A. M., & Longaza, N. I. (2024). "I'm not very skilled in using gadgets:" A qualitative exploration of the facilitators and barriers to using telepharmacy services among Filipino senior citizens. *Exploratory Research in Clinical and Social Pharmacy*, *15*. https://doi.org/https://doi.org/10.1016/j.rcsop.2024.100477

Cohen, S. A. (1987). Instructional Alignment: Searching for a Magic Bullet. *American Educational Research Association*, *16*(8), 16–20. https://doi.org/https://doi.org/10.2307/1175370

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From Game Design Elements to

Gamefulness: Defining Gamification. *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments*, 9–15. https://doi.org/10.1145/2181037.2181040

Fadila, H. N., Koderi, K., Sodiq, A., & Sagala, R. (2025). Literature Review: Aplikasi Mobile Fun Easy Learn Arabic dalam Pembelajaran Kosakata Bahasa Arab. *Naskhi: Jurnal Kajian Pendidikan Dan Bahasa Arab*, *7*(1). https://doi.org/https://doi.org/10.47435/naskhi.v7i1.3486

Fuada, F., Nuraisyah, A., Rahma, H. H., Umbar, K., & Rohman, K. S. (2025). Trends of Gamification Tools in Teaching Arabic in the Era of Globalization: A Literature Review Study. *ATHLA : Journal of Arabic Teaching, Linguistic and Literature,* *6*(2), 30–49. https://doi.org/https://doi.org/10.22515/athla.v6i2.12793

Fuadi, F., & Nurmala, M. (2025). Strategi Pengembangan Buku Digital Interaktif Bahasa Arab Berbasis Lumi Education. *Al-Lahjah : Jurnal Pendidikan, Bahasa Arab Dan Kajian Linguistik Arab*, *8*(2), 1046–1054. https://doi.org/https://doi.org/10.32764/lahjah.v8i2.5847

Hukom, J. (2026a). Gamifikasi dan Game-Based Learning dalam Pembelajaran Bahasa Arab: A Scoping Review. *Jurnal Sains, Teknik, Ekonomi, Dan Pendidikan*, *2*(1), 86–91. https://doi.org/https://doi.org/10.70134/satedik.v2i1.1501

Hukom, J. (2026b). Transformasi Digital Pembelajaran Bahasa Arab: Tinjauan Literatur Sistematis terhadap Pemanfaatan Teknologi dari Aplikasi Seluler hingga Kecerdasan Buatan. *Jurnal Ilmu Ekonomi, Pendidikan Dan Teknik*, *3*(2), 72–77. https://doi.org/https://doi.org/10.70134/identik.v3i2.1488

Ismahani, A., & Hasan, M. A. K. (2026). IMPLEMENTASI MEDIA ICT UNTUK PEMBELAJARAN BAHASA ARAB STUDI KASUS KELAS IV SD ISLAM AL-AZHAR 75 SRAGEN. *Jurnal Ilmiah Wahana Pendidikan*, *12*(6), 41–50. https://jurnal.peneliti.net/index.php/JIWP/article/view/13311

Jaafar, M. N. bin, & Yusoff, N. M. R. N. (2022). Experimental Study of The Effectiveness of Gamification Module for Arabic Language in Primary School. *International Journal of Academic Research in Business and Social Sciences*, *12*(6), 2102–2117. https://doi.org/http://dx.doi.org/10.6007/IJARBSS/v12-i6/14220

Kapp, K. M. (2012). *The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education*. Pfeiffer.

Kitchenham, B., Brereton, O. P., Budgen, D., Turner, M., Bailey, J., & Linkman, S. (2009). Systematic literature reviews in software engineering – A systematic literature review. *Information and Software Technology*, *51*(1), 7–15. https://doi.org/https://doi.org/10.1016/j.infsof.2008.09.009

Lyu, Q., Chen, W., Cheng, X., & Gerard), K. H. H. (John. (2026). Shifting gaze, shifting performance: The role of individual gaze behavior and joint attention in collaborative learning in tech-enhanced classrooms. *The Internet and Higher Education*, *71*. https://doi.org/https://doi.org/10.1016/j.iheduc.2026.101104

Mayer, R. E. (2009). *Multimedia Learning Second Edition : Richard E. Mayer* (2nd ed.). Cambridge University Press.

Midin, L. (2025). Persepsi Siswa Terhadap Pemanfaatan Duolingo Sebagai Media Peningkatan Kemampuan Bahasa Arab di Sekolah Dasar Negeri 2 Medana Kabupaten Lombok Utara.

BIANNUAL CONFERENCE ON ISLAMIC EDUCATION, *1*(2), 293–314. https://bicoin.or.id/journal/index.php/bicoin/article/view/256

Mufleh, K. M. Al, & Inein, R. I. A. (2025). The Impact of Utilizing Gamification Applications on the Achievement of Sixth Graders in Saudi Arabia in Arabic Language Vocabulary and their Attitudes towards Gamification. *Jordanian Educational Journal*, *10*(2), 628–652. https://doi.org/https://doi.org/10.46515/jaes.v10i2.1556

Muzakki, A. A., Harisca, R., & Abdilah, H. I. (2025). TRANSFORMASI PEMBELAJARAN BAHASA ARAB DI ERA DIGITAL: ANTARA INOVASI TEKNOLOGI DAN TANTANGAN PENERAPAN. *Qolamuna : Keislaman, Pendidikan, Literasi Dan Humanior*, *2*(1).

Naqib, M., & Ubaidillah, U. (2025). Inovasi Pembelajaran Bahasa Arab Berbasis Digital di Era Modern: Transformasi Metode, Media, dan Strategi Pembelajaran. *JPIK :JURNAL PEMIKIRAN DAN ILMU KEISLAMAN*, *8*(1). https://journal.ua.ac.id/index.php/jpik/article/view/1014

NAVISAH, D. (2026). Efektivitas media interaktif baamboozle dalam meningkatkan minat belajar bahasa arab siswa. *Maliki Interdisciplinary Journal*, *4*(5), 377–387.

Nazhifa, N. (2025). TRANSFORMASI PENDIDIKAN ERA DIGITAL: TANTANGAN DAN PELUANG BAGI GURU BAHASA ARAB MASA KINI. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, *10*(2), 438–453. https://doi.org/https://doi.org/10.23969/jp.v10i2.24451

Nugrahani, F., Kurniawati, F. E., Saputo, A. S., Haifa, L. F., Toyib, T., Hidayat, T., & Rahmawati, I. (2026). TANTANGAN DAN STRATEGI GURU SEKOLAH DASAR DALAM PENGAJARAN BAHASA DI ERA DIGITAL. *Jurnal Ilmiah Pendidikan Dasar (JIPDAS)*, *6*(3), 3561–3578. https://doi.org/https://doi.org/10.37081/jipdas.v6i3.4794

Nugrahani, W. F., & Abduh, M. (2025). Bagaimana Peran & Dampak Youtube dan Tiktok bagi Siswa Sekolah Dasar? *Aulad : Journal on Early Childhood*, *8*(1), 145–158. https://doi.org/https://doi.org/10.31004/aulad.v8i1.945

Nur, I. R., Rini, F. S., & Mabruroh, H. (2026). Media Pembelajaran Digital Berbasis Aplikasi Android Dalam Pembelajaran Kosakata Bahasa Arab. *Tsaqofiya : Jurnal Pendidikan Bahasa Dan Sastra Arab*, *8*(1), 155–169. https://doi.org/https://doi.org/10.21154/f1j1k902

Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being. *American Psychologist*, *55*(1), 68–78. https://doi.org/10.1037110003-066X.55.1.68

Safitri, M., & Wahdah, N. (2026). Penerapan Media Pembelajaran Bahasa Arab Berbasis Teknologi. *AL-AFKAR:Journal for Islamic Studies*, *9*(1), 15–22. https://doi.org/https://doi.org/10.31943/afkarjournal.v9i1.1983

Sapawi, M. S. M., & Yusoff, N. M. R. N. (2025). Integrating technology into the Arabic language curriculum: A systematic review of trends, strategies and cultural dimensions. *Social Sciences & Humanities Open*, *12*. https://doi.org/https://doi.org/10.1016/j.ssaho.2025.101974

Septiana, G. K., & Jauhari, Q. A. (2025). PEMANFAATAN MEDIA INTERAKTIF FROGGY JUMPS UNTUK MENINGKATKAN PENGUASAAN KOSAKATA BAHASA ARAB SISWA SDI SURYA BUANA MALANG. *Maharaat Lughawiyyat: Jurnal Pendidikan Bahasa Arab*, *4*(2), 90–99. https://doi.org/https://doi.org/10.18860/jpba.v4i2.15551

Uluum, D. C., Musli, M., & Mustar, M. (2025). Pendidikan Bahasa Arab untuk Generasi Z: Strategi

Adaptasi Pengajaran di Era Digital. *JIIP : Jurnal Ilmiah Ilmu Pendidikan*, *8*(4), 3768–3774. https://doi.org/https://doi.org/10.54371/jiip.v8i4.7594

Vygotsky, L. S. (1978). *Mind in Society: Development of Higher Psychological Processes* (M. Cole (ed.)). Harvard University Press.

Winata, G. R. P. W., Dwitaningtyas, A., Shifa, L., & Setiawaty, R. (2025). SISTEMATIK LITERATURE REVIEW: EFEKTIVITAS QUIZIZZ SEBAGAI ASESMEN PEMBELAJARAN BAHASA DI SEKOLAH DASAR BERBASIS GAMIFIKASI. *Dirasah: Jurnal Pemikiran Dan Pendidikan Dasar Islam*, *8*(2), 120–133. https://doi.org/https://doi.org/10.51476/dirasah.v8i2.787

Zahro, F., & Traf, M. (2026). Students' Perceptions of Using Blooket for Arabic Learning in Elementary School. *JALTECH : Journal of Arabic Learning Technology*, *1*(1), 1–17. https://www.jaudahacademy.com/index.php/JALTECH/article/view/14

Zaki, M. (2025). Enhancing Arabic Vocabulary Mastery through Kahoot: Evidence from Elementary Madrasah Students. *Al-Ta'rib : Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab UIN Palangka Raya*, *13*(2), 423–442. https://doi.org/https://doi.org/10.23971/altarib.v13i2.10544