Gamified Digital Tools in Arabic Language Instruction: The Case of Froggy Jumps in an Indonesian Secondary Islamic School

Tarisha Putri[1], **Sahkholid Nasution**[2]

[1,2]*Universitas Islam Negeri Sumatera Utara, Indonesia*
Corresponding Email: tarishaputri@uinsu.ac.id

Abstract

This study investigates the implementation of Froggy Jumps, a gamified digital platform, in enhancing students' motivation to learn Arabic at an Indonesian secondary Islamic school. The research was conducted using a qualitative case study approach involving eighth-grade students and their Arabic teacher. Data were collected through classroom observations, interviews, and documentation. The findings reveal that Froggy Jumps positively influenced classroom dynamics, increased student engagement, and stimulated learning interest. The gamified elements; points, levels, challenges, audio, and visual features, contributed to a more interactive and enjoyable learning experience. However, the implementation was also influenced by several contextual factors, including internet stability, access to digital devices, and classroom management. The study concludes that while Froggy Jumps is a promising instructional tool, its effectiveness depends on adequate infrastructure, teacher readiness, and responsive pedagogical strategies. Further research using quantitative or mixed methods is recommended to evaluate its impact on student learning outcomes more comprehensively.

Keywords: *Arabic Language Instruction, Gamification, Digital Learning, Student Motivation, Froggy Jumps*

Abstrak

Penelitian ini mengkaji penerapan *Froggy Jumps*, sebuah platform digital berbasis gamifikasi, dalam meningkatkan motivasi belajar bahasa Arab di sebuah sekolah menengah Islam di Indonesia. Penelitian menggunakan pendekatan kualitatif dengan desain studi kasus, melibatkan siswa kelas VIII dan guru bahasa Arab mereka. Data dikumpulkan melalui observasi kelas, wawancara, dan dokumentasi. Hasil penelitian menunjukkan bahwa penggunaan *Froggy Jumps* memberikan pengaruh positif terhadap dinamika kelas, meningkatkan keterlibatan siswa, serta merangsang minat belajar. Elemen-elemen gamifikasi seperti poin, level, tantangan, serta fitur audio dan visual berkontribusi dalam menciptakan pengalaman belajar yang lebih interaktif dan menyenangkan. Namun, implementasi media ini juga dipengaruhi oleh beberapa faktor kontekstual seperti stabilitas jaringan internet, ketersediaan perangkat digital, dan pengelolaan suasana kelas. Penelitian ini menyimpulkan bahwa *Froggy Jumps* merupakan media pembelajaran yang menjanjikan, namun efektivitasnya sangat ditentukan oleh kesiapan infrastruktur, kompetensi guru, dan strategi pedagogis yang adaptif. Penelitian lanjutan dengan pendekatan kuantitatif atau campuran disarankan untuk mengevaluasi dampaknya terhadap hasil belajar secara lebih komprehensif.

Kata Kunci: *Pembelajaran Bahasa Arab, Gamifikasi, Pembelajaran Digital, Motivasi Belajar, Froggy Jumps*

Introduction

How is it possible that a language serving as the primary key to understanding the Qur'an and the intellectual heritage of Islam is perceived as tedious by the majority of students in Islamic schools?[1] This question reflects an ongoing irony in the context of Arabic language education in Indonesia. Despite its central position within the Islamic educational system,[2] many students express that Arabic lessons are difficult, uninteresting, and often become a burden in their learning process.[3] This phenomenon raises a pedagogical concern that deserves

---

[1] Tari, D. K., & Rosana, D. (2019). Contextual Teaching and Learning to Develop Critical Thinking and Practical Skills. *Journal of Physics: Conference Series*, *1233*(1), 012102. https://doi.org/10.1088/1742-6596/1233/1/012102

[2] Nasution, Sahkholid, Hasan Asari, Harun Al-Rasyid, Faridah Faridah, Zulpina Zulpina, and Rafiqa Ulfah Rangkuti. (2025). "Arabic Learning and Religious Identity among Non-Muslim Students in Indonesia." *Jurnal Ilmiah Peuradeun* 13(2) 1497-1526. https://doi.org/10.26811/peuradeun.v13i2.2053.

[3] عبد الحكيم عبد الرحمن حسين. (2024). Muhaffazât al-Al'âb al-Raqmiyyah (Gamification) fî Ta'lîmi al-Lughah al-'Arabiyyah: Dirâsatu al-Abhâts al-Mansyûrah

serious attention: Are the current teaching methods truly relevant to the characteristics and needs of 21st-century learners?

Amidst these challenges, advancements in digital technology have introduced new opportunities for the field of education. One promising approach that has begun to demonstrate significant potential is gamification, which refers to the integration of game elements into educational contexts.[4] Various gamified digital platforms have been utilized to create more interactive and enjoyable learning experiences, particularly for subjects often considered monotonous, including Arabic. Platforms such as *Froggy Jumps* present material not only through visual and auditory formats but also foster a competitive spirit and curiosity among students through points, levels, and interactive challenges.

This study emerges from a concrete issue observed at the YAPDI Islamic Secondary School in Medan City, Indonesia. Based on the researcher's observations, it was found that eighth-grade students exhibited alarmingly low levels of interest in Arabic lessons. Many described the subject as boring, difficult to comprehend, and lacking in appeal. Teachers also encountered difficulties in maintaining students' attention and engagement throughout the learning process.

Such conditions highlight the need for alternative approaches that are more contextual, adaptive, and capable of blending entertainment with education. The use of gamified digital platforms such as *Froggy Jumps* is considered a potential solution. However, the extent to which this platform effectively enhances students' motivation and participation in Arabic learning must be verified through thorough and systematic scientific inquiry.

Previous studies support the use of gamified digital media in language education. A study by Miatin Rachmawati revealed that the use of the *Froggy Jumps* application through the *Educaplay* platform improved students' Arabic speaking skills by enhancing their concentration and seriousness in learning, although some students faced challenges related to internet data limitations and vocabulary

---

fî Tathbîqi Muhaffazâti al-Al'âb al-'Arabiyyah fî Indûnîsiyâ. *Alibbaa': Jurnal Pendidikan Bahasa Arab*, 5(1), 1–29.

[4] Azzouz Boudadi, N., & Gutiérrez-Colón, M. (2020). Effect of Gamification on students' motivation and learning achievement in Second Language Acquisition within higher education: a literature review 2011-2019. The EuroCALL Review, 28(1), 40. https://doi.org/10.4995/eurocall.2020.12974

acquisition.[5] Meanwhile, research by Anna et al. at the elementary school level demonstrated that a scientific approach integrated with *Froggy Jumps* significantly improved Indonesian language learning outcomes.[6] Similar findings were presented by Wen, whose study on the impact of gamification in second language acquisition at the elementary level concluded that gamification generally fosters motivation, emotional engagement, and integrated mastery of linguistic aspects such as vocabulary and grammar.[7]

In a broader scope, a literature review by Thurairasu confirmed that gamification-based learning can enhance student participation, material retention, and communication skills, especially when supported by engaging and interactive instructional design.[8] A comparative study by Foroutan et al. on digital versus non-digital gamification showed that both methods significantly improved English vocabulary mastery and encouraged the creation of competitive, collaborative, and enjoyable learning environments.[9] Collectively, these findings provide an essential foundation for the present study in exploring how the implementation of *Froggy Jumps* in Arabic language education at Islamic schools can influence students' motivation and participation in the learning process.

Nevertheless, a common thread among these studies is that the focus remains on the general effectiveness of gamification, without specifically addressing the implementation of *Froggy Jumps* in Arabic

[5] Miatin Rachmawati, & Fitri Liza. (2024). Arabic speaking Skill using the educaplay "froggy jumps" Application. *Alsuniyat : Jurnal Penelitian Bahasa, Sastra, Dan Budaya Arab*, *7*(1), 223–234.

[6] Anna Nur Aswina, Yasir Arafat, & Susanti Faipri Selegi. (2025). The Influence of The Scientific Learning Approach Assisted by Froggy Jumps on The Indonesia Language Learning Outcomes of Grade IV Elementary School Students. *Jurnal Hurriah: Journal of Educational Evaluation and Research*, *6*(2), 709–714.

[7] Wen, X. (2023). The Effect of Gamification Learning on Primary School Students' Second Language Learning. *Journal of Education, Humanities and Social Sciences*, *22*, 492–501. https://doi.org/10.54097/ehss.v22i.12510

[8] Thurairasu, V. (2022). Gamification-Based Learning as The Future of Language Learning: An Overview. *European Journal of Humanities and Social Sciences*, *2*(6), 62–69. https://doi.org/10.24018/ejsocial.2022.2.6.353

[9] Foroutan Far, F., & Taghizadeh, M. (2024). Comparing the effects of digital and non-digital gamification on EFL learners' collocation knowledge, perceptions, and sense of flow. *Computer Assisted Language Learning*, *37*(7), 2083–2115. https://doi.org/10.1080/09588221.2022.2146724

language instruction within the context of Indonesian Islamic schools. Thus, this study is not only important in addressing practical needs in Arabic language education but also contributes to expanding the scholarly discourse on gamification in foreign language learning. By focusing on the learning experiences of eighth-grade students in an Islamic secondary school using *Froggy Jumps* as the primary instructional medium, this research offers a novel perspective that has received limited attention in the existing academic literature. The study aims to determine the extent to which the platform enhances students' motivation to learn Arabic and how its gamified elements shape a more active and participatory learning dynamic.

Method

This study employed a qualitative approach using a case study design to analyze the effectiveness of the digital platform *Froggy Jumps* in enhancing Arabic language learning motivation among eighth-grade students at YAPDI Islamic Secondary School in Medan City, Indonesia. This approach was chosen as it allows the researcher to gain an in-depth understanding of students' experiences and responses within a real learning context. The case study design enables a holistic exploration of the phenomenon within a natural school environment, thereby providing a comprehensive picture of the learning dynamics involved.[10]

The subjects of this study included the Arabic language teacher and eighth-grade students as the primary participants. The selection of participants was conducted purposively, taking into account their direct involvement in the learning process using the *Froggy Jumps* platform. The research setting was the classroom during regular instructional activities, ensuring that the collected data reflected actual, unmanipulated situations.

Data collection was carried out using three primary techniques: direct observation, interviews, and documentation. Observation was conducted to monitor student and teacher behavior during the learning process, with a focus on student engagement, responses to the instructional media, and the overall classroom atmosphere. In-depth interviews were conducted with the Arabic language teacher and selected students to obtain their subjective perspectives regarding their learning

---

[10] Yin, R. K. (2018). *Case study research and applications: Design and methods (6th ed.).* SAGE Publications.

experiences with *Froggy Jumps*. Additionally, documentation, including photographs, student assignments, and field notes, was used to complement and reinforce the findings from observations and interviews.

The collected data were analyzed using the interactive model developed by Miles and Huberman, which consists of three stages: data reduction, data display, and conclusion drawing. Data reduction involved filtering relevant and significant information aligned with the research focus. Data were then presented in the form of thematic narratives, allowing the researcher to identify relationships among categories. Conclusions were drawn inductively based on the interpretation of the analyzed data.[11]

To ensure data validity, this study applied triangulation techniques in both methods and data sources. Triangulation was carried out by comparing the results of observations, interviews, and documentation to gain a more accurate and in-depth understanding. Data validation was further strengthened through participant confirmation, ensuring that the researcher's interpretations accurately reflected the realities experienced by the participants.

Results and Discussion

The Arabic language learning process using *Froggy Jumps* began with the teacher introducing the rules of the game. The teacher displayed the game interface on the classroom screen via a projector, showing a digital frog character that would "jump" to the correct answer. Students were instructed to pay attention to the questions appearing on the screen, which included vocabulary choices, meaning recognition, and basic grammatical forms. Each question was time-bound, and students were required to respond quickly in order to maintain their group's score. The activity was conducted in a whole-class setting, with the teacher dividing the class into several small groups.

During the session, students demonstrated a high level of engagement. They actively discussed within their groups, reacted enthusiastically to the questions presented, and eagerly awaited their group's turn to answer. The classroom atmosphere became competitive yet remained conducive to learning. The inclusion of time limits and

---

[11] Matthew B. Miles, A. Michael Huberman, & Johnny Saldaña. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). SAGE Publications.

challenges effectively heightened students' focus on both the teacher's instructions and the visual content displayed on the screen. The learning environment became significantly more dynamic compared to conventional lecture-based or written practice sessions.

Observation results showed that approximately 85% of students were actively engaged in the activity, with only a small number remaining passive or distracted. Indicators of engagement included verbal participation in group discussions, quick responses to questions, and non-verbal expressions such as smiling, clapping, or enthusiastic gestures. Visual documentation captured during the session depicted students raising their hands, pointing to the screen, or simultaneously offering answers. Some students even spontaneously expressed that they wished for more frequent sessions like this.

Pedagogically, the teacher found the platform beneficial for facilitating classroom management. During *Froggy Jumps* sessions, the teacher did not need to constantly redirect or reprimand students, as their attention was already fully focused on the game. The teacher merely moderated the flow of the session, provided clarifications when necessary, and offered praise or bonus points to the most actively participating groups. This reduced the instructional burden and allowed the teacher to concentrate more on monitoring the students' learning processes.

The platform's integrated visual and audio features further supported concept comprehension.[12] Images representing vocabulary, along with the pronunciation of words or Arabic-language instructions, helped students to better understand and retain the material. This multimodal approach accelerated the association between word forms, sounds, and meanings.[13] As a result, the learning process became not only cognitive but also sensory and affective, making the material more memorable for students.[14]

---

[12] Shortt, M., Tilak, S., Kuznetcova, I., Martens, B., & Akinkuolie, B. (2023). Gamification in mobile-assisted language learning: a systematic review of Duolingo literature from public release of 2012 to early 2020. *Computer Assisted Language Learning*, *36*(3), 517–554. https://doi.org/10.1080/09588221.2021.1933540

[13] Khuluq, M., Hasanah, M., Muasshomah, M., & Imamah, N. (2024). Mobile-Assisted Language Learning Apps: The Analysis of Duolingo. *Al-Ta'rib : Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya*, *12*(2), 229–246. https://doi.org/10.23971/altarib.v12i2.8806

[14] Shiddiq, J., Zubaidi, A., Nur Kholis, M., & Rokhani, R. (2024). Feasibility of Web-based Digital Arabic Gamification Media for Islamic Junior High School

In addition, *Froggy Jumps* provides opportunities for students with different learning styles to thrive. Students who are typically passive during conventional question-and-answer sessions became more vocal during gamified sessions. They felt free to take risks and were not afraid of making mistakes, as the game was light-hearted and non-threatening. This activity also encouraged students to work collaboratively in teams, fostering social skills and group responsibility.[15]

Based on the findings from classroom observations and documentation throughout the learning process, there was a noticeable shift in classroom interaction patterns during the use of *Froggy Jumps*. Learning activities became more participatory, with the teacher's role shifting from being the primary source of information to a facilitator of activities. Meanwhile, students showed a greater tendency to actively participate and collaborate within their groups. This transformation did not occur by chance; rather, it was supported by a set of interrelated factors within the classroom context.

One of the main contributing factors identified was the high level of intrinsic motivation among students when faced with a learning model that was both challenging and enjoyable. Interactive activities that incorporated healthy competition and audiovisual elements successfully sparked students' enthusiasm to engage without coercion.[16] This enthusiasm served as a valuable asset in creating a lively classroom atmosphere and enabled teachers to facilitate the learning process more effectively.[17]

Another key factor was the availability of adequate supporting infrastructure. The effective use of *Froggy Jumps* would not have been possible without proper hardware such as an LCD projector, active speakers, and a stable internet connection. Field observations revealed that the school had provided most of these essential facilities, allowing

---

Students. *Arabiyatuna: Jurnal Bahasa Arab*, *8*(1), 169. https://doi.org/10.29240/jba.v8i1.8946

[15] Hanifah. "Motivasi Belajar Dalam Pembelajaran Bahasa Arab." *INTAJUNA: Jurnal Hasil Penelitian Studi Kepustakaan, Penilaian, Penerapan Teori Dan Kajian Analisis Di Bidang Pendidikan Bahasa Arab* 3, no. 1 (2019): 14-20.

[16] Khairani, Beby, Citra Sukma Ayu, Mita Atiqah Ginting, and Sahkholid Nasution. "Analisis Faktor-Faktor Yang Mempengaruhi Minat Belajar Bahasa Arab Siswa MTs Ira Medan." *Indo-MahEdu Intellectual Journal* 5, no. 6 (2024): 8007-18.

[17] Kizilcec, R. F., & Schneider, E. (2015). Motivation as a Lens to Understand Online Learners. *ACM Transactions on Computer-Human Interaction*, *22*(2), 1–24. https://doi.org/10.1145/2699735.

the activities to proceed relatively smoothly. Such infrastructural support from the educational institution strengthened the technical readiness of both teachers and students to access the digital platform optimally.[18]

The teacher's active role also emerged as a critical element in the successful implementation of *Froggy Jumps*. The teacher who facilitated the session demonstrated adaptability to technology and skill in curating relevant instructional content. The Arabic learning material integrated into the game was appropriately calibrated to the students' level of proficiency, in terms of vocabulary, sentence structures, and question formats. This reflected a synergy between pedagogical and digital competencies.[19]

Nevertheless, alongside these supporting factors, several technical challenges were also encountered during implementation. One of the main obstacles was unstable internet connectivity. In some sessions, delays in loading questions or interruptions during gameplay caused students to lose focus and disrupted the flow of instruction. Although these were technical issues, under certain conditions, they directly impacted the effectiveness of the learning interaction.

Another identified challenge was the limited access to personal devices among students, particularly when the platform was intended for individual use. Not all students owned personal gadgets, meaning the digital game-based learning had to be conducted collectively in the classroom using a single main device. This limited the flexibility of implementation and required the teacher to manage instructional delivery strategies to ensure equitable learning opportunities for all students.[20]

Furthermore, the high level of student enthusiasm sometimes posed a challenge in classroom management. On several occasions, the class became excessively noisy due to spontaneous reactions to the game, with students shouting answers or expressing strong emotions when experiencing failure. While such behavior reflected strong

---

[18] Kizilcec, R. F., & Schneider, E. (2015). Motivation as a Lens to Understand Online Learners. *ACM Transactions on Computer-Human Interaction*, *22*(2), 1–24. https://doi.org/10.1145/2699735

[19] Nasution, Sahkholid, Hasan Asari, Harun Al-Rasyid, Rasyid Anwar Dalimunthe, and Aulia Rahman.

"Learning Arabic Language Sciences Based on Technology in Traditional

Islamic Boarding Schools in Indonesia." *Nazhruna: Jurnal Pendidikan Islam* 7, no. 1 (2024): 77-102. https://doi.org/10.31538/nzh.v7il.4222.

[20] Rahman, Nur Fuadi. "Motivasi Belajar Bahasa Arab (Studi Kasus Mahasiswa PBA IAIN Palangkaraya)." *Al-Bayan* 10, no. 1 (2018): 22-35.

engagement, it could also disrupt concentration if not managed properly. The teacher thus needed to strike a balance between creating an enjoyable learning atmosphere and maintaining classroom discipline.

Discussion

Research findings indicate that the use of the digital platform *Froggy Jumps* has brought a positive impact on students' engagement in learning Arabic, particularly in terms of increasing motivation and participation. This phenomenon aligns with the core principles of gamification in education, which aim to make learning more engaging by incorporating game-like elements into academic activities.[21] In this context, the presence of points, levels, challenges, and audiovisual features serves as an additional stimulus that encourages students to be cognitively and emotionally involved.[22]

Students' active engagement during learning sessions can also be explained through Richard E. Mayer's Multimedia Learning Theory, which posits that information processing becomes more effective when learners receive content through a combination of visual and auditory channels.[23] *Froggy Jumps* presents vocabulary and grammar exercises in an interactive format, thus facilitating conceptual understanding through multimodal learning experiences. This helps explain why students more easily comprehend, recall, and apply the material when the learning environment is enjoyable.[24]

The shift in the teacher's role, from a primary source of information to a learning facilitator, also reflects the constructivist approach to learning. In this approach, students actively construct their

---

[21] Ismail, H., Ayoubi, M. el, Qassem, M., & Areefi, F. al. (2024). Assessing the Impact of Gamification Tools' Usability on Student Engagement: A Comparative Study in Engineering Education. *2024 4th Interdisciplinary Conference on Electrics and Computer (INTCEC)*, 1–8. https://doi.org/10.1109/INTCEC61833.2024.10603117

[22] Mohzana, M. (2024). Evaluation of the Use of Gamification in Language Learning for Students in Indonesia. *International Journal of Language and Ubiquitous Learning*, *1*(4). https://doi.org/10.70177/ijlul.v1i4.681

[23] Mayer, R. E. (2002). *Multimedia learning* (pp. 85–139). https://doi.org/10.1016/S0079-7421(02)80005-6

[24] Hadi, N., Alvina, N., & Khaled Radhouani. (2024). Ta'zîzu Dâfi'iyyati Thullâbi Riyâdh al-Athfâl li Tathwîri Mahârât al-Lughah al-'Arabiyyah al-Syafawiyyah min Khilâli Barâmiji al-Ta'lîm al-Mukatstsaf. *Alibbaa': Jurnal Pendidikan Bahasa Arab*, *5*(2), 189–214. https://doi.org/10.19105/ajpba.v5i2.12195

own knowledge through interactions with the learning environment.[25] Through the use of *Froggy Jumps*, teachers are able to design learning strategies that emphasize collaboration, exploration, and immediate feedback. This demonstrates that digital technology, when used strategically, can effectively support learner-centered pedagogical approaches.[26]

Nonetheless, the implementation of *Froggy Jumps* is not without challenges. Technical issues such as unstable internet connections and limited access to personal devices remain significant barriers. These findings are consistent with previous research emphasizing that the effectiveness of digital learning is highly influenced by the availability of infrastructure and the digital competence of users.[27] Thus, the success of digital media integration in classrooms is not determined solely by the quality of the platform, but also by the presence of a supportive learning environment.[28]

Overall, the findings from this study offer a preliminary overview of the potential of gamification in Arabic language instruction, particularly in the context of Islamic schools in Indonesia. While the study is limited in scale and methodology, its results may serve as a foundation for developing more innovative and adaptive learning strategies suited to the needs of 21st-century learners. Future efforts should consider incorporating more systematic quantitative measurements to objectively assess and generalize the impact of gamification on student learning outcomes.

---

[25] Hamid, M. Abdul and Husein, Sahya. *Desain Bahan Ajar Bahasa Arab Berbasis Digital Teori Dan Praktik*. Insight Mediatama, Mojokerto., 2024.

[26] Tiara Sabilla, Toto Edidarmo, Fudhaili, A., Shahid Seif al Din, & Jawhar Youssef. (2025). Tathwîr al-Rusûm al-Hazliyyah al-Raqmiyyah 'alâ Tathbîq Canva li Ta'lîmi Mahârati al-Qirâah Ladâ Thullâbi al-Madrasati al-Ibtidâiyyah al-Islâmiyyah bi Indonesia. *Alibbaa': Jurnal Pendidikan Bahasa Arab*, *6*(1), 65–98. https://doi.org/10.19105/ajpba.v6i1.17624

[27] Rosell-Aguilar, F. (2018). Autonomous language learning through a mobile application: a user evaluation of the *busuu* app. *Computer Assisted Language Learning*, *31*(8), 854–881. https://doi.org/10.1080/09588221.2018.1456465

[28] AlDakhil, M., & AlFadda, H. (2021). EFL Learners' Perceptions Regarding the Use of Busuu Application in Language Learning: Evaluating the Technology Acceptance Model (TAM). *English Language Teaching*, *15*(1), 1. https://doi.org/10.5539/elt.v15n1p1

Conclusion

Penelitian ini menyimpulkan bahwa penggunaan platform digital *Froggy Jumps* dalam pembelajaran bahasa Arab di tingkat sekolah menengah Islam memberikan dampak positif terhadap motivasi dan keterlibatan siswa. Pembelajaran yang semula bersifat satu arah dan cenderung monoton berubah menjadi lebih dinamis, interaktif, dan kompetitif. Fitur-fitur gamifikasi seperti poin, level, tantangan, serta elemen visual dan audio terbukti mampu membangkitkan minat siswa untuk lebih aktif dalam proses belajar. Selain itu, peran guru juga mengalami pergeseran yang konstruktif dari penyampai materi menjadi fasilitator kegiatan belajar yang mendorong kolaborasi dan kemandirian siswa.

Namun, efektivitas implementasi platform ini sangat bergantung pada berbagai faktor pendukung seperti ketersediaan infrastruktur digital, kesiapan guru dalam mengelola media pembelajaran berbasis teknologi, dan antusiasme siswa dalam mengikuti metode baru. Di sisi lain, tantangan yang muncul berupa keterbatasan perangkat, ketidakstabilan jaringan internet, serta pengelolaan suasana kelas yang terlalu semarak perlu menjadi perhatian dalam perencanaan pembelajaran digital berbasis gamifikasi.

Berdasarkan temuan ini, disarankan agar guru mempertimbangkan penggunaan *Froggy Jumps* sebagai media pembelajaran alternatif, terutama dalam konteks materi yang memerlukan peningkatan motivasi belajar. Institusi pendidikan juga perlu memastikan tersedianya dukungan teknis yang memadai agar proses pembelajaran digital dapat berjalan optimal. Untuk pengembangan lebih lanjut, penelitian lanjutan dapat dilakukan dengan pendekatan kuantitatif atau campuran (mixed methods) guna mengukur pengaruh *Froggy Jumps* terhadap hasil belajar secara lebih objektif dan terukur. Dengan demikian, integrasi teknologi dalam pembelajaran bahasa Arab dapat terus disempurnakan sesuai dengan tuntutan zaman dan karakteristik peserta didik masa kini.

REFERENCES

AlDakhil, M., and H. AlFadda. "EFL Learners' Perceptions Regarding the Use of Busuu Application in Language Learning: Evaluating the Technology Acceptance Model (TAM)." *English Language Teaching* 15, no. 1 (2021): 1. https://doi.org/10.5539/elt.v15n1p1.

Aswina, Anna Nur, Yasir Arafat, and Susanti Faipri Selegi. "The Influence of The Scientific Learning Approach Assisted by Froggy Jumps on The Indonesia Language Learning Outcomes of Grade IV Elementary School Students." *Jurnal Hurriah: Journal of Educational Evaluation and Research* 6, no. 2 (2025): 709–714.

Boudadi, N. Azzouz, and M. Gutiérrez-Colón. "Effect of Gamification on Students' Motivation and Learning Achievement in Second Language Acquisition within Higher Education: A Literature Review 2011–2019." *The EuroCALL Review* 28, no. 1 (2020): 40. https://doi.org/10.4995/eurocall.2020.12974.

Far, Foroutan Far, and M. Taghizadeh. "Comparing the Effects of Digital and Non-Digital Gamification on EFL Learners' Collocation Knowledge, Perceptions, and Sense of Flow." *Computer Assisted Language Learning* 37, no. 7 (2024): 2083–2115. https://doi.org/10.1080/09588221.2022.2146724.

Hadi, N., N. Alvina, and Khaled Radhouani. "Ta'zîzu Dâfi'iyyati Thullâbi Riyâdh al-Athfâl li Tathwîri Mahârât al-Lughah al-'Arabiyyah al-Syafawiyyah min Khilâli Barâmiji al-Ta'lîm al-Mukatstsaf." *Alibbaa': Jurnal Pendidikan Bahasa Arab* 5, no. 2 (2024): 189–214. https://doi.org/10.19105/ajpba.v5i2.12195.

Hamid, M. Abdul, and Sahya Husein. *Desain Bahan Ajar Bahasa Arab Berbasis Digital Teori Dan Praktik*. Mojokerto: Insight Mediatama, 2024.

Hanifah. "Motivasi Belajar Dalam Pembelajaran Bahasa Arab." *INTAJUNA: Jurnal Hasil Penelitian Studi Kepustakaan, Penilaian, Penerapan Teori Dan Kajian Analisis Di Bidang Pendidikan Bahasa Arab* 3, no. 1 (2019): 14–20.

Ismail, H., M. el Ayoubi, M. Qassem, and F. al Areefi. "Assessing the Impact of Gamification Tools' Usability on Student Engagement: A Comparative Study in Engineering Education." *2024 4th Interdisciplinary Conference on Electrics and Computer*

(INTCEC) (2024): 1–8. https://doi.org/10.1109/INTCEC61833.2024.10603117.

Khairani, Beby, Citra Sukma Ayu, Mita Atiqah Ginting, and Sahkholid Nasution. "Analisis Faktor-Faktor Yang Mempengaruhi Minat Belajar Bahasa Arab Siswa MTs Ira Medan." *Indo-MahEdu Intellectual Journal* 5, no. 6 (2024): 8007–8018.

Khuluq, M., M. Hasanah, M. Muasshomah, and N. Imamah. "Mobile-Assisted Language Learning Apps: The Analysis of Duolingo." *Al-Ta'rib: Jurnal Ilmiah Program Studi Pendidikan Bahasa Arab IAIN Palangka Raya* 12, no. 2 (2024): 229–246. https://doi.org/10.23971/altarib.v12i2.8806.

Kizilcec, R. F., and E. Schneider. "Motivation as a Lens to Understand Online Learners." *ACM Transactions on Computer-Human Interaction* 22, no. 2 (2015): 1–24. https://doi.org/10.1145/2699735.

Mayer, R. E. *Multimedia Learning*, 85–139. 2002. https://doi.org/10.1016/S0079-7421(02)80005-6.

Miles, Matthew B., A. Michael Huberman, and Johnny Saldaña. *Qualitative Data Analysis: A Methods Sourcebook*. 3rd ed. SAGE Publications, 2014.

Mohzana, M. "Evaluation of the Use of Gamification in Language Learning for Students in Indonesia." *International Journal of Language and Ubiquitous Learning* 1, no. 4 (2024). https://doi.org/10.70177/ijlul.v1i4.681.

Nasution, Sahkholid, Hasan Asari, Harun Al-Rasyid, Faridah Faridah, Zulpina Zulpina, and Rafiqa Ulfah Rangkuti. "Arabic Learning and Religious Identity among Non-Muslim Students in Indonesia." *Jurnal Ilmiah Peuradeun* 13, no. 2 (2025): 1497–1526. https://doi.org/10.26811/peuradeun.v13i2.2053.

Nasution, Sahkholid, Hasan Asari, Harun Al-Rasyid, Rasyid Anwar Dalimunthe, and Aulia Rahman. "Learning Arabic Language Sciences Based on Technology in Traditional Islamic Boarding Schools in Indonesia." *Nazhruna: Jurnal Pendidikan Islam* 7, no. 1 (2024): 77–102. https://doi.org/10.31538/nzh.v7il.4222.

Rahman, Nur Fuadi. "Motivasi Belajar Bahasa Arab (Studi Kasus Mahasiswa PBA IAIN Palangkaraya)." *Al-Bayan* 10, no. 1 (2018): 22–35.

Rachmawati, Miatin, and Fitri Liza. "Arabic Speaking Skill Using the Educaplay 'Froggy Jumps' Application." *Alsuniyat: Jurnal*

Penelitian Bahasa, Sastra, Dan Budaya Arab 7, no. 1 (2024): 223–234.

Rosell-Aguilar, F. "Autonomous Language Learning through a Mobile Application: A User Evaluation of the Busuu App." *Computer Assisted Language Learning* 31, no. 8 (2018): 854–881. https://doi.org/10.1080/09588221.2018.1456465.

Sabilla, Tiara, Toto Edidarmo, A. Fudhaili, Shahid Seif al Din, and Jawhar Youssef. "Tathwîr al-Rusûm al-Hazliyyah al-Raqmiyyah 'alâ Tathbîq Canva li Ta'lîmi Mahârati al-Qirâah Ladâ Thullâbi al-Madrasati al-Ibtidâiyyah al-Islâmiyyah bi Indonesia." *Alibbaa': Jurnal Pendidikan Bahasa Arab* 6, no. 1 (2025): 65–98. https://doi.org/10.19105/ajpba.v6i1.17624.

Shiddiq, J., A. Zubaidi, M. Nur Kholis, and R. Rokhani. "Feasibility of Web-Based Digital Arabic Gamification Media for Islamic Junior High School Students." *Arabiyatuna: Jurnal Bahasa Arab* 8, no. 1 (2024): 169. https://doi.org/10.29240/jba.v8i1.8946.

Shortt, M., S. Tilak, I. Kuznetcova, B. Martens, and B. Akinkuolie. "Gamification in Mobile-Assisted Language Learning: A Systematic Review of Duolingo Literature from Public Release of 2012 to Early 2020." *Computer Assisted Language Learning* 36, no. 3 (2023): 517–554. https://doi.org/10.1080/09588221.2021.1933540.

Tari, D. K., and D. Rosana. "Contextual Teaching and Learning to Develop Critical Thinking and Practical Skills." *Journal of Physics: Conference Series* 1233, no. 1 (2019): 012102. https://doi.org/10.1088/1742-6596/1233/1/012102.

Thurairasu, V. "Gamification-Based Learning as The Future of Language Learning: An Overview." *European Journal of Humanities and Social Sciences* 2, no. 6 (2022): 62–69. https://doi.org/10.24018/ejsocial.2022.2.6.353.

Wen, X. "The Effect of Gamification Learning on Primary School Students' Second Language Learning." *Journal of Education, Humanities and Social Sciences* 22 (2023): 492–501. https://doi.org/10.54097/ehss.v22i.12510.

Yin, R. K. *Case Study Research and Applications: Design and Methods*. 6th ed. SAGE Publications, 2018.

حسين عبد الرحمن عبد الحكيم. "Muhaffazât al-Al'âb al-Raqmiyyah (Gamification) fî Ta'lîmi al-Lughah al-'Arabiyyah: Dirâsatu al-Abhâts al-Mansyûrah fî Tathbîqi Muhaffazâti al-Al'âb al-

ALIBBAA’: Jurnal Pendidikan Bahasa Arab, 6 (2), 2025

’Arabiyyah fî Indûnîsiyâ.” *Alibbaa’: Jurnal Pendidikan Bahasa*
Arab 5, no. 1 (2024): 1–29.