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Developing and Piloting a Kahoot-Based Arabic Reading Assessment for Seventh-Grade Students at MTs Al-Yasini Pasuruan

Wilda Rihlasyita[1*], Ida Hidayati[2], Siti Fathimah Al Fathiyah[3], Fadhel Mubarak[4]

[1,2]Institut Agama Islam Al-Yasini, Pasuruan, Indonesia
[3]Sekolah Tinggi Ilmu Tarbiyah Ibnu Sina, Malang, Indonesia
[4]Yarmouk University, Irbid, Jordan

rihlasyita.wilda@gmail.com[1], idahidayati153@gmail.com[2]
, faelfath@gmail.com[3], 2023184053@ses.yu.edu.jo[4]
*Correspondence

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Abstract

This study developed and evaluated a Kahoot-based assessment tool for Arabic reading (maharah qirā'ah) among seventh-grade female students at MTs Al-Yasini, Pasuruan. Using research and development procedures guided by the ADDIE model, the study involved 26 students in one class. The instrument was reviewed by three experts, implemented in a one-group pretest–posttest design, and evaluated through tests, questionnaires, interviews, and classroom observations. The mean score increased from 45.69 (SD = 13.59) before implementation to 90.00 (SD = 8.47) afterward; a paired-samples t test showed a statistically significant difference, $t(25) = -15.88$, $p < .001$, with a very large within-group effect ($d_z = 3.11$). Expert validation scores were 68.6%, 98.2%, and 98.1%. Teacher and student responses were generally favorable. Overall, the assessment was feasible in this class, and scores improved substantially after implementation; however, the one-group design does not establish that Kahoot caused the improvement or support broad generalization.

***Keywords**: Arabic reading assessment; Kahoot; digital formative assessment; Arabic language education; pesantren.*

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Introduction

Assessment is part of instruction: it provides evidence about learners' progress, helps teachers identify difficulties, and informs subsequent teaching decisions. In language education, assessment needs to represent the construct being measured and use tasks appropriate to learners' proficiency. Arabic reading assessment is especially demanding because learners must coordinate orthographic recognition, vocabulary, morphology, syntax, and interpretation of connected text. Arabic L2 readability research has shown that text complexity can be modeled computationally, underscoring the need to match reading passages to learner level (Nassiri et al., 2022). Work on Arabic reading fluency likewise suggests that assessment should attend to several dimensions rather than rely on a single general score (Yunianti et al., 2025).

Digital response systems offer one way to make classroom assessment more interactive and provide immediate performance information. Kahoot combines timed questions and visual feedback with game-design elements associated with gamification (Deterding et al., 2011). Reviews of educational gamification and Kahoot-based learning suggest potential benefits, while noting that outcomes depend on design and implementation (Dichev & Dicheva, 2017; Özdemir, 2025; Wang & Tahir, 2020). Research syntheses on digital game-based second-language vocabulary learning indicate potential benefits, while noting variation across game types, designs, and study conditions (Tsai & Tsai, 2018; Zou et al., 2021). These findings support using Kahoot as an assessment delivery platform, but they do not establish that the platform itself teaches reading or guarantees valid measurement.

Arabic-language studies provide a closer but still incomplete evidence base. Eltahir et al. (2021) reported improved motivation, engagement, and academic performance when game-based learning was used in an Arabic grammar course. Altakhaineh and Sulaiman (2025) examined Kahoot combined with Total Physical Response for vocabulary learning. Tahir and Wang (2024) studied game-based Arabic learning with refugee children, while Fazza (2021) examined collaborative digital reading through Perusall. These studies address useful adjacent questions—motivation, vocabulary, general achievement, and digital reading strategies—but do not directly evaluate a Kahoot instrument designed to assess Arabic reading in a formal Islamic junior high school. The distinction matters: an instructional game may support learning, whereas a digital assessment instrument must also align item content, response format, scoring, and feedback with the intended reading construct.

Other work points to the need for context-sensitive implementation. Research on pre-service Arabic teachers has linked digitalisation and pedagogical competence (Hanifah et al., 2024), while Nurbayan and Sanusi (2025) describe constraints in teachers' technology integration. In pesantren contexts, technology use should be compatible with curricular goals and classroom routines. Recent work reports that gamified Arabic instruction can support motivation in grammar learning, and an Arabic–Islamic immersion study describes engagement in a boarding-school setting (Kasmaluddin et al., 2026; Mukhasibi & Wahyudi, 2026). A CIEE study reports that structured digital media can be integrated

into pesantren language instruction, although it concerns listening and community service rather than reading assessment (Lazuardi et al., 2026). These sources inform context and implementation, not direct evidence of Kahoot's efficacy for reading assessment. Recent studies have examined digital game-based Arabic communication and WhatsApp-supported self-regulated Arabic learning (Hayazi & Khairi, 2026; Masnun & Johari, 2026). These studies address communication and learner autonomy rather than Arabic reading assessment.

At MTs Al-Yasini, the initial needs analysis indicated that assessment relied mainly on paper-based tests and that teachers sought more engaging tools. The present study responds by developing a Kahoot-based assessment instrument, validating it with content, assessment, and media experts, and piloting it with seventh-grade female students in the Genius class. Its empirical contribution is a documented development and classroom pilot in an Arabic reading context. The study asks: (1) How feasible is the developed instrument according to expert review? (2) How do students' reading scores differ before and after implementation? and (3) What are teacher and student responses to the tool? The one-group design is treated as a preliminary evaluation; it can establish a within-class score change but cannot isolate the effect of Kahoot from practice, instruction, or other time-related factors.

Method

This research and development study used the ADDIE sequence—analysis, design, development, implementation, and evaluation—to create and pilot a Kahoot-based Arabic reading assessment. The work took place at MTs Al-Yasini, Pasuruan, Indonesia. The evaluation phase used a one-group pretest–posttest design. This design was selected for an initial classroom pilot after instrument development; unlike a randomized or controlled comparison, it does not estimate a causal effect independent of other influences.

Participants were 26 seventh-grade female students in the Genius class, selected purposively because the class was available for the development trial and could participate in digital assessment. During analysis, classroom observation and an interview with the Arabic teacher were used to identify needs and existing assessment practices. In the design phase, learning objectives, reading indicators, item formats, and scoring procedures were aligned with the class curriculum. During development, the Kahoot items and presentation were reviewed by a content specialist, an assessment specialist, and a learning-media specialist; revisions were made in response to their recommendations. In implementation, students completed a pretest, used the developed assessment in classroom activities, and completed a posttest.

The primary outcome was students' Arabic reading test score. Expert-review percentages were used as a feasibility indicator, not as evidence of learning effectiveness. Student and teacher questionnaire responses were summarized descriptively; interview and observation information was used to contextualize implementation and responses (Creswell & Plano Clark, 2018). Pretest and posttest scores were analyzed with a paired-

samples t test. The difference was calculated as pretest minus posttest, so a negative mean difference represents higher posttest scores. We report the test statistic, degrees of freedom, p value, and standardized within-group effect size (Cohen's d_z), calculated as the mean paired difference divided by the standard deviation of paired differences Cohen (1988). The paired-score correlation is not interpreted as evidence for or against intervention effectiveness because it does not test the mean change.

The Arabic reading assessment comprised 50 items: 30 multiple-choice items and 20 true/false items. Responses were scored as follows: 1 point was awarded for each correct answer across both item types, and 0 points were assigned to incorrect or unanswered items, yielding a maximum raw score of 50. Raw scores were converted to a 100-point scale using the formula converted score = (raw score ÷ 50) × 100. The pretest and posttest scores reported in this study are converted scores. The items assessed four areas: vocabulary recognition (*mufradāt*), sentence-level syntactic comprehension (*tarākīb*), identification of main ideas, and retrieval of specific information from short Arabic passages. Kahoot's speed-based bonus was disabled during both tests; therefore, the scores reflected response accuracy rather than response speed. During development, the instrument was reviewed by a content specialist, an assessment specialist, and a learning-media specialist using a 5-point Likert scale validation rubric. The validation percentages were interpreted using five categories adapted from Akbar's criteria (2013, as cited in Muhimmatin et al., 2025): 81%–100% = very valid (usable without revision); 61%–80% = valid (usable with minor revisions); 41%–60% = less valid (major revision required); 21%–40% = invalid; and 0%–20% = completely invalid. Post-implementation responses were collected via questionnaires administered to the entire cohort of 26 participating students and the single Arabic subject teacher.

This research was conducted in strict adherence to standard ethical guidelines for educational research involving human participants. Prior to the commencement of data collection, formal permission and administrative approval were obtained from the principal and relevant authorities of MTs Al-Yasini, Pasuruan. Because the participants were minor students, informed consent was acquired from their parents or legal guardians, and verbal assent was provided by the students themselves. All participants were assured that their involvement was entirely voluntary, their data would remain strictly anonymous and confidential, and their decision to participate or withdraw at any time would not negatively impact their academic standing or grades.

Results and Discussion

Initial classroom observations and a preliminary interview with the Arabic teacher confirmed the practical need for the developed instrument. Observations during standard instruction revealed that students frequently exhibited passive behavior and low engagement during conventional, paper-based Arabic reading exercises. The interview with the sole Arabic teacher ($N = 1$) highlighted that routine assessments relied heavily on printed student worksheets (LKS). While the teacher expressed a strong desire to integrate interactive digital assessments to boost engagement, they cited limited time and

technical familiarity as primary barriers. During the implementation phase, classroom observations indicated a marked shift: students demonstrated high enthusiasm, active participation, and sustained attention to the digital display. However, observations also noted that early in the session, several students rushed to select answers before fully processing the Arabic texts, which practically validated the methodological decision to disable Kahoot's speed-scoring feature for the formal tests.

The three experts assigned scores of 68.6% for Arabic content and linguistic accuracy, 98.2% for assessment design, and 98.1% for instructional media. Based on the categories described in the Methods section (Akbar, 2013, as cited in Muhimmatin et al., 2025), the content and linguistic-accuracy score (68.6%) falls within the "valid with minor revisions" range, whereas the assessment-design (98.2%) and instructional-media (98.1%) scores fall within the "very valid" range. The lower content score indicates that linguistic accuracy and the alignment among reading indicators, passages, and items should be reviewed before the instrument is used more broadly. Expert ratings provide one source of evidence, but they do not by themselves establish that score interpretations are valid or that the tool improves reading (American Educational Research Association et al., 2014). The development of Arabic reading media through role-playing games, digital materials, and interactive formative activities offers useful procedural comparisons (Farhan et al., 2024; Malikh et al., 2025; Shakira & Zukhaira, 2026). Those studies used different media, learners, and validation procedures, so their feasibility findings cannot validate the present Kahoot instrument. Table 1 presents the individual pretest and posttest scores for all 26 participants; posttest scores were higher for every student.

Table 1. Individual Pretest and Posttest Scores

No.	Participant code	Pretest	Posttest
1	S01	44	96
2	S02	20	92
3	S03	48	96
4	S04	40	92
5	S05	60	92
6	S06	36	92
7	S07	68	92
8	S08	64	92
9	S09	32	88
10	S10	44	96
11	S11	48	96
12	S12	36	96
13	S13	64	92
14	S14	52	72
15	S15	64	100
16	S16	32	96

17	S17	56	72
18	S18	36	86
19	S19	44	96
20	S20	20	72
21	S21	32	80
22	S22	48	88
23	S23	48	100
24	S24	40	86
25	S25	48	80
26	S26	44	100

At the group level, the mean pretest score was 45.69 (SD = 13.59), compared with 90.00 (SD = 8.47) at posttest (Table 2).

Table 2 Descriptive statistics for paired scores

Measure	M	N	SD	SE
Pretest	45.69	26	13.585	2.664
Posttest	90.00	26	8.466	1.660

The mean score rose from 45.69 (SD = 13.59) at pretest to 90.00 (SD = 8.47) at posttest. The mean paired difference, calculated as pretest minus posttest, was −44.31 points (SD = 14.23), and the paired-samples test showed a statistically significant within-class change, $t(25) = -15.88$, $p < .001$. The standardized within-subject effect was large ($d_z = 3.11$). This describes a marked change among the 26 participating students after the classroom implementation. Because there was no comparison group, the design cannot isolate the contribution of Kahoot from regular teaching, practice with similar items, repeated testing, or other changes over time. The nonsignificant pretest–posttest correlation ($r = .234$, $p = .251$) describes the association between the two sets of scores; it does not explain the gain or establish its cause.

Table 3 Paired-samples test

Comparison	Mean difference	SD of differences	T	df	p
Pretest – posttest	−44.308	14.229	−15.878	25	< .001

Note. The pretest–posttest correlation was r = .234, p = .251; this statistic does not test the mean change.

Studies using Kahoot with English reading tasks provide a relevant but indirect comparison. Korkmaz and Öz (2021) reported improved reading scores after a seven-week intervention, while Marsa et al. (2021), Narváez Paguay and Santillán (2021), and Pahamzah et al. (2022) also described positive outcomes or learner responses in EFL reading contexts. The overlap is the use of interactive quizzes to prompt attention to text and check comprehension. The studies differ from the present work in language, learner

level, intervention length, and research design; they therefore support the plausibility of the approach rather than demonstrate that Kahoot caused the Arabic score change observed here. The current result is best interpreted as a promising pilot finding that warrants a controlled follow-up.

Reading assessment needs to represent comprehension of connected text rather than only speeded recognition or recall. Research on Arabic reading has highlighted the importance of text readability and multiple dimensions of reading performance (Nassiri et al., 2022; Yunianti et al., 2025). Hammad's (2019) study of web-based leveled reading for Arabic learners also makes text level and learner experience relevant to digital reading design. In a different assessment model, Mustiah et al. (2024) examined mobile-assisted hybrid dynamic assessment for Arabic reading comprehension, in which assessment is connected to instructional mediation. Together, these studies suggest that digital delivery should be aligned with text difficulty, targeted subskills, and the feedback learners receive. They do not test Kahoot or establish the validity of this study's items.

Recent Arabic reading-media development studies offer additional design comparisons. Farhan et al. (2024) developed a role-playing game for Arabic reading, Malikh et al. (2025) evaluated digital reading materials, and Shakira and Zukhaira (2026) developed interactive reading media that combines texts, vocabulary, comprehension activities, and game-based formative checks. These studies show how Arabic reading resources can be organized around the skill being taught, but their learning-media outcomes should not be treated as evidence that a separate assessment instrument measures reading accurately. For the present tool, reporting sample items, text sources and levels, the comprehension processes assessed, scoring rules, and reliability evidence would make that distinction clearer. The study adds to contextual work on gamified Arabic instruction and digital game-based communication (Kasmaluddin et al., 2026; Hayazi & Khairi, 2026) by documenting a pilot of a digital assessment instrument for Arabic reading.

Regarding user responses, the teacher questionnaire was completed by the single participating Arabic teacher (N = 1). This teacher rated the instrument completely favorably (1 out of 1, or 100%) across all pedagogical and usability items, noting that the tool effectively facilitated formative assessment without adding administrative burden. The student questionnaire, completed by all 26 participants (N = 26), provided detailed insights into learner perceptions. Specifically, 19 out of 26 students (73%) rated the overall design as "very good," while the remaining 7 students (27%) rated it as "good." In response to separate questionnaire items, 16 students (62%) reported greater enjoyment than with traditional tests, 14 (54%) appreciated the audiovisual and competitive elements, and 12 (46%) said the digital format motivated them to read and analyze Arabic texts. These responses indicate robust acceptance in this class. A review of Kahoot in language classrooms describes engagement as a potential affordance of the platform, while emphasizing the need to connect game features to instructional purposes (Kohnke & Moorhouse, 2022).

The response pattern is also consistent with research on Kahoot's effects on classroom participation and learner perceptions (Licorish et al., 2018; Ebadi et al., 2023; Ranieri et al., 2021). Formative-assessment research indicates that feedback is most useful when it helps learners and teachers decide what to do next, rather than merely displaying points or rankings (Black & Wiliam, 2009; Hattie & Timperley, 2007; Shute, 2008). Multimedia design should likewise support the reading task without adding irrelevant visual or audio demands (Mayer, 2021). In practice, teachers can use Kahoot for brief reading checks when questions target comprehension, feedback explains why an answer is correct, and timed competition does not displace careful reading.

The study involved one class of 26 students, used no control group, and incompletely reported item construction, expert-review procedures, and questionnaire data. These constraints limit causal conclusions and transfer to other grades or schools. Variation in Arabic-language outcomes across school settings further supports cautious generalization (Langsten et al., 2022). Future research should compare the Kahoot assessment with a paper-based or alternative digital version, describe item development and reading subskills, report content-review decisions and reliability evidence, and verify the assumptions of the paired-samples analysis. Reporting complete questionnaire items and denominators would also make the perception results interpretable. A larger multi-class study with a suitable comparison condition could test whether gains persist and whether they differ by reading proficiency. On the current evidence, the instrument is a feasible classroom pilot accompanied by a substantial observed score change; its independent effectiveness remains to be established.

Conclusion

Using the ADDIE model, this study developed and piloted a Kahoot-based assessment tool for Arabic reading (*maharah qirā'ah*) among 26 seventh-grade female students at MTs Al-Yasini in Pasuruan. The expert assessment scores were 68.6%, 98.2%, and 98.1%, indicating variation across the assessed dimensions and the need for continued refinement. Teacher and student responses were generally favorable, suggesting that the tool was acceptable in this classroom setting. The students' mean reading score increased from 45.69 before implementation to 90.00 afterward. A paired-samples test showed a statistically significant pre–post difference, $t(25) = -15.88$, $p < .001$; the negative sign reflects the calculation of the difference as pretest minus posttest. Together, these findings address the study's objectives by documenting the development and classroom reception of the tool, as well as a substantial improvement in scores following its implementation.

The results provide preliminary support for using Kahoot as a digital assessment format for Arabic reading in this context. However, because the study involved one class of 26 students and used a one-group pretest–posttest design without a comparison group, the score increase cannot establish that Kahoot alone caused the improvement or that the findings apply to other settings. Future studies should include larger and more diverse

samples, comparison groups, and clearly documented evidence of test validity, reliability, and questionnaire results.

Statement on the Use of AI and AI-Based Technology in the Writing Process

During the preparation of this manuscript, the authors used ChatGPT (OpenAI) to assist with language editing.

Author Contribution Statement

WR conceptualized the study, developed the methodology and assessment instrument, conducted the investigation and data collection, performed the formal analysis, and prepared the original manuscript draft. IH contributed to the study design, instrument development and validation, data collection, and manuscript review. SFAF contributed to instrument validation, interpretation of the findings, and manuscript review and editing. FM contributed to methodological supervision, interpretation of the results, and critical revision of the manuscript. All authors reviewed and approved the final version.

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Data Availability Statement

The individual-level data supporting the findings are not publicly available because they contain educational records of minor students. De-identified data may be considered for reasonable requests, subject to school authorization and applicable ethical and privacy requirements.

Declaration of Interests

The authors declare that they have no competing financial, personal, professional, or other interests that could have influenced the conduct or reporting of this study.

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References

Altakhaineh, A. R. M., & Sulaiman, N. A. (2025). Teaching English vocabulary to Arabic-speaking EFL learners through Total Physical Response and Kahoot. The International Journal of Technologies in Learning, 32(2), 169–182. https://doi.org/10.18848/2327-0144/CGP/v32i02/169-182

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). Standards for educational and psychological testing. American Educational Research Association.

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. Educational Assessment, Evaluation and Accountability, 21(1), 5–31. https://doi.org/10.1007/s11092-008-9068-5

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum Associates.

Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). SAGE.

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining "gamification." In Proceedings of the 15th International Academic MindTrek Conference (pp. 9–15). ACM. https://doi.org/10.1145/2181037.2181040

Dichev, C., & Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. International Journal of Educational Technology in Higher Education, 14(1), Article 9. https://doi.org/10.1186/s41239-017-0042-5

Ebadi, S., Rasouli, R., & Mohamadi, M. (2023). Exploring EFL learners' perspectives on using Kahoot as a game-based student response system. Interactive Learning Environments, 31(4), 2338–2350. https://doi.org/10.1080/10494820.2021.1881798

Eltahir, M. E., Alsalhi, N. R., Al-Qatawneh, S., AlQudah, H. A., & Jaradat, M. (2021). The impact of game-based learning (GBL) on students' motivation, engagement and academic performance on an Arabic language grammar course in higher education. Education and Information Technologies, 26(3), 3251–3278. https://doi.org/10.1007/s10639-020-10396-w

Farhan, A., Kamal, M., & Sarip, M. (2024). Developing role playing games for the skill of reading the Arabic language. Arabiyatuna: Jurnal Bahasa Arab, 8(2), 487–508. https://doi.org/10.29240/jba.v8i2.9858

Fazza, H. (2021). AFL students' perceptions of the use of an interactive digital platform to enhance reading strategies: An activity theory perspective. In I. Fayed & J. Cummings (Eds.), Teaching in the post-COVID-19 era (pp. 403–414). Springer. https://doi.org/10.1007/978-3-030-74088-7_40

Hammad, M. (2019). The impact of a web-based leveled reading program on Arabic language learners' reading experiences. Foreign Language Annals, 52(2), 413–432. https://doi.org/10.1111/flan.12395

Hanifah, U., Adam, Z. B., Faizin, M., Jannah, I. M., & Hanafi, Y. (2024). Accelerating the digitalisation of learning post-COVID-19 era to improve the pedagogical competence of pre-service Arabic teachers. Cogent Education, 11(1), Article 2413241. https://doi.org/10.1080/2331186X.2024.2413241

Hattie, J., & Timperley, H. (2007). The power of feedback. Review of Educational Research, 77(1), 81–112. https://doi.org/10.3102/003465430298487

Hayazi, M. F. binti M., & Khairi, N. A. N. B. A. (2026). Digital game-based Arabic communication and learner participation: Evidence from Kedah religious secondary schools. *Journal of Arabic Language Technology and Education, 1*(1), 28–39. https://doi.org/10.68299/n9b5d344

Kasmaluddin, K., Fauzan, A., & Lazuardi, A. M. (2026). Gamified instruction in Arabic morphosyntax: Enhancing learner motivation in Nahwu–Sharaf education. Farasyah: Journal of Linguistics and Language Education, 1(1), 54–64. https://doi.org/10.68299/vr909517

Kohnke, L., & Moorhouse, B. L. (2022). Using Kahoot! to gamify learning in the language classroom. RELC Journal, 53(3), 769–775. https://doi.org/10.1177/00336882211040270

Korkmaz, S., & Öz, H. (2021). Using Kahoot! to improve reading comprehension of English as a foreign language learners. International Online Journal of Education and Teaching, 8(2), 1138–1150. https://www.iojet.org/index.php/IOJET/article/view/1002

Langsten, R., Abdelkhalek, F., & Hassan, T. (2022). Arabic language skills: A comparative study of community and government schools in rural Upper-Egypt. Compare: A Journal of Comparative and International Education, 52(6), 879–894. https://doi.org/10.1080/03057925.2020.1843003

Lazuardi, A. M., Baharun, S., Solehudin, M., & Husein, A. F. (2026). Enhancing Arabic listening comprehension skills through YouTube-based learning: A community service program at Ribath Imam Al-Ghazali. Community, Innovation, Education, and Empowerment, 1(1), 1–8. https://doi.org/10.68299/hs4r7p93

Licorish, S. A., Owen, H. E., Daniel, B., & George, J. L. (2018). Students' perception of Kahoot!'s influence on teaching and learning. Research and Practice in Technology Enhanced Learning, 13(1), Article 9. https://doi.org/10.1186/s41039-018-0078-8

Malikh, M. Q., Mubaligh, A., & Fitriani, L. (2025). Development and evaluation of digital learning materials for Arabic reading skills using a scientific approach in Islamic elementary schools. Syaikhuna: Jurnal Pendidikan dan Pranata Islam, 16(1), 113–128. https://doi.org/10.62730/syaikhuna.v16i01.7675

Marsa, S. S., Kuspiyah, H. R., & Agustina, E. (2021). The effect of Kahoot! game in teaching reading comprehension achievement. Journal of English Teaching, 7(2), 133–149. https://doi.org/10.33541/jet.v7i2.2738

Masnun, M., & Johari, N. S. binti. (2026). WhatsApp-based educational content and self-regulated Arabic learning: Evidence from mobile-assisted language learning. *Journal of Arabic Language Technology and Education, 1*(1), 57–66. https://doi.org/10.68299/193n3682

Mayer, R. E. (2021). Multimedia learning (3rd ed.). Cambridge University Press. https://doi.org/10.1017/9781316941355

Mukhasibi, A., & Wahyudi, I. (2026). Immersive Arabic Islamic environment and student engagement: Evaluating the linguistic impact of World Arabic Language. Farasyah: Journal of Linguistics and Language Education, 1(1), 1–12. https://doi.org/10.68299/3j9nf868

Muhimmatin, I., Putri, Z. E., & Jannah, I. N. (2025). Development of contextual-based booklet as learning media to improve student's motivation in MA Al-Qodiri Kalipuro Banyuwangi. *Journal of Biology Education, 14*(3), 272–278. https://doi.org/10.15294/ujbe.v14i3.17804

Mustiah, M., Dayat, D., & Sadek, N. (2024). The impact of mobile-assisted hybrid dynamic assessment on Arabic language learners' reading comprehension performance. JOLLT Journal of Languages and Language Teaching, 12(1), 524–534. https://doi.org/10.33394/jollt.v12i1.9158

Narváez Paguay, J. A., & Santillán, J. J. (2021). The implementation of the Student Response System (SRS) Kahoot! in EFL classes and its effects on reading comprehension. INNOVA Research Journal, 6(2), 1–21. https://doi.org/10.33890/innova.v6.n2.2021.1655

Nassiri, N., Lakhouaja, A., & Cavalli-Sforza, V. (2022). Arabic L2 readability assessment: Dimensionality reduction study. Journal of King Saud University–Computer and Information Sciences, 34(6), 3789–3799. https://doi.org/10.1016/j.jksuci.2020.12.021

Nurbayan, Y., & Sanusi, A. (2025). Integrating character values and EdTech media: A study of Arabic teachers' pedagogical competence in Bandung Raya. International Journal of Learning, Teaching and Educational Research, 24(8), 248–271. https://doi.org/10.26803/ijlter.24.8.11

Özdemir, O. (2025). Kahoot! game-based digital learning platform: A comprehensive meta-analysis. Journal of Computer Assisted Learning, 41(1), Article e13084. https://doi.org/10.1111/jcal.13084

Pahamzah, J., Syafrizal, S., & Nurbaeti, N. (2022). The effects of EFL course enriched with Kahoot on students' vocabulary mastery and reading comprehension skills. Journal of Language and Linguistic Studies, 18(1), 643–652. https://doi.org/10.52462/jlls.209

Ranieri, M., Raffaghelli, J. E., & Bruni, I. (2021). Game-based student response system: Revisiting its potentials and criticalities in large-size classes. Active Learning in Higher Education, 22(2), 129–145. https://doi.org/10.1177/1469787418812667

Shakira, W. A., & Zukhaira, Z. (2026). Designing interactive digital media for Arabic reading learning: Development and validation of Ayo Qira. Journal of Arabic Language Learning and Teaching, 4(2), 209–224. https://doi.org/10.23971/jallt.v4i2.527

Shute, V. J. (2008). Focus on formative feedback. Review of Educational Research, 78(1), 153–189. https://doi.org/10.3102/0034654307313795

Tahir, R., & Wang, A. I. (2024). Evaluating the effectiveness of game-based learning for teaching refugee children Arabic using the integrated LEAGUÊ-GQM approach. Behaviour & Information Technology, 43(1), 110–138. https://doi.org/10.1080/0144929X.2022.2156386

Tsai, Y.-L., & Tsai, C.-C. (2018). Digital game-based second-language vocabulary learning and conditions of research designs: A meta-analysis study. *Computers & Education, 125*, 345–357. https://doi.org/10.1016/j.compedu.2018.06.020

Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning—A literature review. Computers & Education, 149, Article 103818. https://doi.org/10.1016/j.compedu.2020.103818

Yunianti, F. S., Robbani, A. S., Khafidhoh, Salamah, S., & Baharun, M. N. A. S. (2025). Enhancing Arabic language reading skills through Arabic news anchors: A comparative study of Indonesian and Malaysian students. Pertanika Journal of Social Sciences and Humanities, 33(3), 995–1010. https://doi.org/10.47836/pjssh.33.3.03

Zou, D., Huang, Y., & Xie, H. (2021). Digital game-based vocabulary learning: Where are we and where are we going? *Computer Assisted Language Learning*, *34*(5–6), 751–777. https://doi.org/10.1080/09588221.2019.1640745