

Exploring Student Perceptions of Online Vocabulary Games for Learning : A Literature Review

Dewi Syafitri¹, Fauziah Fatima Az-zahra Marwan Putri²

Universitas PGRI Silampari ^{1 2}

fauziahshighiry@gmail.com

Abstract

Vocabulary acquisition remains a challenge in EFL contexts. This review examines how mobile-assisted online vocabulary games influence learner perceptions and vocabulary development. Through a structured analysis of peer-reviewed studies, we synthesized evidence on engagement, motivation, and retention. Findings indicate that flashcards, quizzes, crosswords, and peer-competition features promote practice, enjoyment, and confidence, while digital distractions, uneven access, and limited teacher readiness present significant barriers. We conclude that embedding mobile vocabulary games within structured curricula and providing targeted professional development enhances their effectiveness. Implications include the need for coherent pedagogical integration; future research should investigate long-term learning trajectories and blended instructional models.

Keywords : *Digital Tools, Student's Perspective, Teaching Strategy, Vocabulary Games*

INTRODUCTION

Vocabulary is a crucial component of language learning, forming the foundation for reading, listening, speaking, and writing skills (Tangahu, 2012). However, in many EFL settings, teaching vocabulary remains a persistent challenge. Traditional methods—such as rote memorization and textbook-based drills—are often viewed as tedious and ineffective, resulting in low motivation and poor long-term retention (Klimová, 2019).

The rise of mobile learning (M-learning) offers a new pathway for vocabulary instruction. Educational apps like Duolingo, Quizlet, and Seppo integrate game-like elements, multimedia, and self-paced practice, allowing students to learn vocabulary anytime and anywhere (Kacetyl & Klimová, 2019; Zhou, 2024). These tools support autonomous learning and encourage repeated exposure, making vocabulary practice more engaging and accessible.

Students' perceptions of these tools play a key role in their effectiveness. When learners view mobile-based vocabulary games positively, they are more likely to be motivated and engaged, which can lead to better learning outcomes (Ochoa-Cueva et al., 2023).

The author's interest in this topic stems from the growing use of smartphones among students and the need for more engaging, technology-driven vocabulary learning methods. While M-learning tools are increasingly common, there is still a lack of focused studies on how students perceive their use—particularly in the context of vocabulary learning.

This literature review aims to explore how students perceive online vocabulary games within mobile learning environments, highlighting both the benefits and challenges identified in existing research.

LITERATURE REVIEW

Theoretical Foundation of Mobile-Assisted Vocabulary Learning

Mobile learning (M-learning) refers to the use of portable digital devices—such as smartphones and tablets—to access educational content anytime and anywhere. In the context of vocabulary acquisition, M-learning supports flexible, self-paced, and interactive language learning experiences beyond the traditional classroom (Kacatl & Klimová, 2019). This approach is grounded in constructivist learning theory, which emphasizes active, autonomous learning through meaningful engagement (Kiili, 2005).

One of M-learning's primary strengths is its ability to foster learner autonomy and self-regulation. Vocabulary applications like Duolingo, Quizlet, and Seppo offer gamified tasks—such as flashcards, quizzes, matching games, and word puzzles—that provide immediate feedback and utilize spaced repetition systems. These features not only enhance memory retention but also promote consistent vocabulary practice (Zhou, 2024).

Key Concepts and Multimedia Integration

A core concept in M-learning is multimodal input, which refers to the integration of various sensory channels—such as visual, auditory, and contextual cues—to support vocabulary learning. Mobile applications often include images, audio recordings, example sentences, and animations to help learners associate spelling, meaning, and pronunciation simultaneously. Klimová (2019) notes that such multimodal designs significantly aid cognitive processing and long-term retention.

In addition, many mobile apps support collaborative learning through competitive quizzes or group-based challenges (e.g., Kahoot!, Quizizz), enabling learners to practice vocabulary in social contexts while maintaining a fun and low-pressure environment (Ochoa-Cueva et al., 2023). These elements address not only the cognitive but also the affective dimensions of learning—reducing anxiety and increasing engagement.

Relevance and Empirical Support

Several studies have affirmed the effectiveness of M-learning for vocabulary development. Kacatl and Klimová (2019) found that students using

vocabulary apps regularly performed better in recall tests than those using traditional methods. Similarly, Rahini et al. (2024) observed that students using mobile crossword games showed greater motivation and retention.

Although Game-Based Learning (GBL) is often cited for its motivational benefits (Kapp, 2012; Sayd & Nazarudin, 2022), in this review, such game elements are considered within the broader context of mobile applications rather than as a separate pedagogical approach. In mobile learning environments, games function as tools to enhance engagement, not as stand-alone frameworks.

Challenges and Considerations

Despite its advantages, integrating mobile learning into educational practice presents challenges. Digital distractions, unequal access to devices, connectivity issues, and limited teacher training are common barriers (Klimová, 2019). Effective implementation requires aligning mobile tools with curricular goals and ensuring that their use remains pedagogically sound.

Mobile-assisted vocabulary learning, supported by constructivist principles and enhanced through gamified and multimodal design, offers a promising approach for language learners—especially in EFL contexts. This literature review adopts M-learning as the primary lens for understanding student perceptions, as it reflects both the technological reality of learners today and the evolving nature of language education.

RESEARCH METHOD

This study applies a qualitative-descriptive approach through a structured literature review to examine how mobile learning applications—especially those that include vocabulary games—support vocabulary acquisition in EFL (English as a Foreign Language) contexts. It also explores how students perceive these digital tools in their learning process. As emphasized by Snyder (2019), structured literature reviews are useful not only for summarizing past findings but also for identifying research gaps and informing future pedagogical practices.

The review is guided by the following research questions:

1. How does mobile learning help students improve their English vocabulary?
2. How do students perceive the use of mobile tools and vocabulary games in vocabulary instruction?
3. What benefits and challenges are associated with implementing such strategies?

Data Collection and Inclusion Criteria

The review comprises several studies randomly selected from peer-reviewed journal articles and conference proceedings. The studies were selected based on the following criteria:

- Focus on English vocabulary acquisition.
- Use of mobile or game-based digital tools.
- Relevance to EFL learners,

- Clear research methodology and reported outcomes.
- Published in English and accessible through Google Scholar, ERIC, ResearchGate, and publisher platforms.

Keywords such as “game-based learning,” “vocabulary mastery,” “mobile learning,” “smartphone apps,” “EFL learners,” “digital games,” and “student perceptions” were used during the search process. Abstracts and full texts were screened to ensure thematic relevance and methodological rigor.

Among the selected works are classroom-based action research studies (e.g., Sayd & Nazarudin, 2022), experimental or quasi-experimental designs (e.g., Abdulrahman et al., 2020; Rahini et al., 2024), and perception-based surveys or qualitative inquiries (e.g., Ochoa-Cueva et al., 2023; Korkealahto & Siklander, 2018). Together, they represent a spectrum of learner levels, from young children to university students, and cover settings in Asia, Latin America, and Europe.

FINDING

Impact of Mobile Learning on Vocabulary Improvement

The findings from the selected studies reveal a positive impact of mobile-based vocabulary games on EFL learners’ vocabulary acquisition and engagement. Kacetyl & Klimová (2019) found that mobile applications facilitated vocabulary practice during daily routines—students using mobile apps practiced during free moments throughout the day, contributing to distributed learning and long-term retention. Learners also appreciated the interactive format and instant feedback provided by mobile tools. Rahini et al. (2024) reported that learners who used mobile crossword games retained more words after three weeks and demonstrated stronger contextual use than those taught through textbooks, suggesting that these tools promote deeper engagement and memory reinforcement. Zhou (2024) emphasized that features like streaks, reminders, and micro-learning moments in mobile apps help form consistent vocabulary-learning habits; in contexts with limited classroom exposure, these features play a vital role in sustaining learner effort.

Student Perceptions of Mobile Tools and Vocabulary Games

Similarly, Abdulrahman et al. (2020) observed improved post-test vocabulary scores among junior high school students after using Android-based vocabulary games. Students engaged with features such as animations, sound effects, and scoring systems, which increased their involvement and enthusiasm during the learning process. Sayd & Nazarudin (2022) noted that students were enthusiastic, collaborative, and eager to participate in vocabulary activities such as word-matching and vocabulary races; learners reported higher confidence and reduced boredom while learning through games. Ochoa-Cueva et al. (2023) found that social and competitive aspects in vocabulary games (e.g., peer competition, team-based challenges) enhanced emotional involvement and vocabulary retention, supporting Vygotsky’s (1978) sociocultural theory on the importance of social interaction.

Benefits and Challenges of Implementing Mobile-Based Vocabulary Games

Overall, the results demonstrate that mobile-based vocabulary games support both vocabulary growth and emotional-motivational factors, contributing to more meaningful and consistent vocabulary development among EFL learners. Benefits include flexible access anytime, anywhere (distributed learning), instant feedback and gamification elements that strengthen engagement, and a heightened sense of enjoyment and achievement. Challenges reported in the broader literature include digital distractions and unequal device access (Garrett & Short, 2021), limited teacher readiness for pedagogical integration (Harmer, 2001; Nation, 2013), and the need for reliable supporting infrastructure (stable internet, charging facilities, and private learning spaces). These challenges underscore the importance of thoughtful implementation and adequate support when integrating mobile vocabulary games into language curricula.

DISCUSSIONS

The findings support the argument that mobile learning tools, particularly those that incorporate vocabulary games, can substantially enhance vocabulary acquisition in EFL contexts. These results answer the research questions affirmatively: mobile tools help learners build vocabulary and are perceived positively by students.

The increase in test performance (e.g., Sayd & Nazarudin; Abdulrahman et al., 2022) reflects the effectiveness of mobile learning in delivering repeated, engaging exposure to vocabulary. These gains align with Nation's (2013) emphasis on the need for repetition and meaningful use. Moreover, tools like crossword puzzles and flashcard apps promoted both surface-level recognition and contextual usage, supporting long-term retention.

Motivation was also a consistent theme. Learners reported that vocabulary games increased enjoyment, curiosity, and willingness to learn. According to Dörnyei & Ushioda (2011), motivation drives both the initiation and sustainability of language learning behavior. The reviewed studies show that mobile learning tools fulfill these motivational needs through personalization, gamification, and learner autonomy.

However, several challenges were identified. Korkealehto & Siklander (2018) noted that some teachers lacked the digital literacy to implement GBL effectively, often treating games as a supplementary rather than integrated instructional method. Abdulrahman et al. and Kacetl & Klimová (2019) highlighted time and infrastructure limitations, particularly in low-resource environments. Mobile distractions were also a concern, as mentioned by Zhou (2024), which could dilute learning outcomes without teacher monitoring.

Despite these barriers, the pedagogical implications remain strong. Games and mobile apps should not be treated as standalone solutions but rather as complementary tools within a blended instructional approach. As Klimová (2019) suggested, integrating mobile learning within curriculum frameworks can enhance learner autonomy, consistency, and retention.

CONCLUSIONS AND SUGGESTIONS

In sum, this review shows that combining game-based and mobile-assisted methods in EFL vocabulary instruction transforms rote memorization into engaging, interactive learning that enhances motivation, participation, and retention. Learners consistently report greater confidence and enjoyment when using features such as spaced repetition, multimedia prompts, and social challenges. To capitalize on these benefits, institutions should provide teachers with targeted training, guarantee equitable device access, and weave digital activities into coherent lesson plans. Future research ought to explore long-term effects across diverse contexts and refine blended-learning frameworks that seamlessly integrate

game mechanics with pedagogical aims, ensuring sustained vocabulary development beyond the classroom.

REFERENCES

- Abdulrahman, Talal R. A., Novita Basalama, and M. R. Widodo. *Android-Based Application for Vocabulary Learning: What Do Students Say?* *Journal of English Language Teaching and Linguistics* 5, no. 1 (2020): 62–74.
- Dörnyei, Zoltán, and Ema Ushioda. *Teaching and Researching Motivation*. 2nd ed. London: Routledge, 2011.
- Fauzi, Iwan. “Improving Vocabulary Through Implementing Song and Game-Based Learning Strategy of English for Young Learners.” *Yavana Bhasha: Journal of English Language Education* 5, no. 1 (2022): 1–9.
- Ghazy, Ahmad, Majid Wajdi, and Clary Ikhsan Sada. “The Use of Game-Based Learning in English Class.” *Journal of Applied Studies in Language* 5, no. 1 (2021): 1–10.
- Hussein, Mahmood H., Siew Hock Ow, and Cheong Yu Cheng. “Effects of Digital Game-Based Learning on Elementary Science Learning: A Systematic Review.” *IEEE Access* 7 (2019): 128849–128866.
- Kacatl, Jaroslav, and Blanka Klimová. “Use of Smartphone Applications in English Language Learning—A Challenge for Foreign Language Education.” *Education Sciences* 9, no. 3 (2019): 1–9.
- Kapp, Karl M. *The Gamification of Learning and Instruction: Game-Based Methods and Strategies for Training and Education*. San Francisco: Pfeiffer, 2012. <https://doi.org/10.1145/2207270.2211316>
- Kiili, Kristian. “Digital Game-Based Learning: Towards an Experiential Gaming Model.” *Internet and Higher Education* 8, no. 1 (2005): 13–24.
- Klimová, Blanka. “Mobile Phones and/or Smartphones and Their Apps for Teaching English as a Foreign Language.” *Education and Information Technologies* 24 (2019): 3219–3224. <https://doi.org/10.1007/s10639-017-9655-5>
- Korkealehto, Kirsi, and Pirkko Siklander. “Enhancing Engagement, Enjoyment and Learning Experiences through Gamification on an English Course for Higher Education.” *Seminar.net* 14, no. 2 (2018): 168–184.
- Nurchintyawati, Insani. “Android Based Educational Game in Learning and Teaching English Vocabulary.” *Journal of Applied Linguistics and Literature* 7, no. 1 (2022): 46–55.
- Ochoa-Cueva, Carlos, Cristina Varela, and Edison Maldonado. “Engaging Young Learners in Learning Vocabulary: A Study on Digital Game-Based Learning in EFL Classrooms.” *International Journal of Education and Practice* 11, no. 1 (2023): 1–12.
- Rahini, Ni Tagel, I Nyoman Sudirman, and I. N. Sudarmiyati. “Application of Game-Based Learning Using Crossword Media in Improving English Vocabulary.” *Aktual: Jurnal Pengabdian* 8, no. 15 (2024): 112–123.
- Saputra, Alfi Diotama, Livia Septiani, and Adriani Septiani. “Game-Based English Learning for Young Learners: A Systematic Review.” *JEDu: Journal of English Education* 2, no. 2 (2021): 75–82.

- Zhou, Mei. “Enhancing Engagement, Enjoyment, and Learning Experiences through Digital Game-Based Vocabulary Instruction.” *Journal of Educational Multimedia and Hypermedia* 33, no. 2 (2024): 155–172.
- Sayd, A. I., & Nazarudin, H. (2022, December). *Game-Based Learning to Improve the Vocabulary Mastery in EFL Class*. In *Proceedings of the International Conference on Applied Science and Technology on Social Science 2022 (iCAST-SS 2022)* (pp. 321–326). Atlantis Press. https://doi.org/10.2991/978-2-494069-83-1_58