Journal of Literature, Languages and Linguistics
ISSN 2422-8435 An International Peer-reviewed Journal
Vol.111, 2026

Gamified Learning for Medical English: Using Kahoot and Quizlet to Enhance Engagement and Retention

Lien My Tran*
Department of Foreign Languages, University of Medicine and Pharmacy at Ho Chi Minh City,
217 Hong Bang Street, Cho Lon Ward, Ho Chi Minh City, Vietnam
* E-mail of the corresponding author: tmliendhyd@ump.edu.vn

Abstract

Teaching Medical English to medical undergraduates continues to present challenges related to maintaining learner motivation, encouraging active participation, and supporting long term retention of specialized vocabulary. This paper explores the integration of gamified learning tools, namely Kahoot and Quizlet, into Medical English courses at the University of Medicine and Pharmacy at Ho Chi Minh City. Gamified activities were incorporated into regular classroom instruction to facilitate the learning and consolidation of medical terminology while fostering a more interactive learning environment. The study adopted a practice-based approach combined with a small scale mixed method design, drawing on questionnaire data and open ended student feedback from 60 second year medical students. The findings indicate that gamification positively influences student engagement and motivation, enhances vocabulary recall, and contributes to a more dynamic and supportive classroom atmosphere. Students also reported reduced learning anxiety and increased peer interaction. Overall, the results suggest that when used purposefully, Kahoot and Quizlet can transform medical vocabulary learning from a largely passive process into an active and meaningful experience. The study concludes that gamified learning offers an effective, low cost, and sustainable pedagogical strategy for English for Medical Purposes, with potential relevance for broader ESP contexts.

Keywords: Gamification, Medical English, Kahoot, Quizlet, engagement, retention, UMP at HCMC

DOI: 10.7176/JLLL/111-01

Publication date: April 30th 2026

1. INTRODUCTION

The expanding use of digital technologies in language education has brought significant changes to classroom practices and learner engagement across disciplines. In English for Medical Purposes, these changes are particularly relevant, as students must work with specialized content, complex terminology, and professional communication conventions early in their training. Maintaining motivation while supporting meaningful and durable acquisition of medical vocabulary remains a persistent challenge. Traditional instructional approaches, such as memorization of word lists, lecture centered explanations, and textbook based exercises, often provide limited opportunities for active language use and may not sufficiently support long term retention, especially in large classes with restricted instructional time.

Medical English plays a vital role in preparing future physicians to access academic resources, communicate effectively in clinical settings, and participate in international medical communities. At University of Medicine and Pharmacy at Ho Chi Minh City, Medical English courses aim to develop both terminological knowledge and communicative competence relevant to professional practice. In response to challenges related to student engagement and uneven participation, gamified learning has emerged as a promising pedagogical approach. Digital tools such as Kahoot and Quizlet incorporate elements of interaction, feedback, and collaboration that can transform vocabulary learning into an active and meaningful process. Within the context of Medical English, these tools offer structured opportunities for practicing pronunciation, word formation, and contextual language use. This study investigates the integration of Kahoot and Quizlet into Medical English courses at UMP HCMC, examining their impact on student engagement, motivation, and perceived vocabulary retention, and seeks to provide practical insights for learner centered instruction in medical ESP contexts.

2. LITERATURE REVIEW

Gamified learning has increasingly been discussed as a pedagogical response to persistent challenges in language education, particularly those related to learner motivation and sustained engagement. The theoretical foundations

of gamification are closely associated with self-determination theory, which emphasizes the role of autonomy, competence, and relatedness in fostering intrinsic motivation (Deci & Ryan, 2000). From this perspective, learning environments that allow learners to make choices, experience progress, and interact meaningfully with peers are more likely to support active and sustained participation. Deterding et al. (2011) conceptualize gamification as the use of selected game design elements in non-game contexts, highlighting that its educational value lies not in entertainment alone, but in its capacity to structure learning experiences in motivating and cognitively engaging ways.

Empirical research in language education suggests that gamified approaches can positively influence learner engagement, collaboration, and learning outcomes. Studies have reported increased attention, enjoyment, and willingness to participate when game-based elements are incorporated into classroom activities (Lee & Hammer, 2011; Zainuddin et al., 2020). In vocabulary learning, gamification has been associated with improved retention through repeated exposure, immediate feedback, and active recall practices (Caponetto et al., 2014). Digital tools that embed these features provide learners with opportunities to interact with language in ways that differ from traditional drill-based instruction, thereby supporting deeper cognitive processing.

2.1 Medical English and Vocabulary Learning in ESP

English for Medical Purposes represents a specialized branch of English for Specific Purposes that focuses on discipline specific language, genres, and communicative practices relevant to healthcare contexts (Dudley Evans & St John, 1998). Medical vocabulary is characterized by high density, technical precision, and strong conceptual links to biomedical knowledge. As a result, effective learning requires more than memorization of terms; it involves understanding word formation, pronunciation, and appropriate use within clinical and academic discourse. Previous research indicates that medical students benefit from instructional approaches that integrate vocabulary learning with authentic tasks, such as case discussions and professional communication activities, which help bridge the gap between language form and clinical meaning (Bosher & Smalkoski, 2002).

Despite its importance, vocabulary learning in Medical English remains challenging, particularly in large classes and time constrained curricula. Learners often report difficulty retaining terms and applying them confidently in communicative contexts. These challenges point to the need for pedagogical strategies that support repeated practice while maintaining learner motivation and relevance to professional goals.

2.2 Gamified Learning in Language Education

Within language education, gamified learning has been associated with increased motivation, reduced learning anxiety, and greater learner participation (Warschauer, 2000). Game related features such as points, competition, and instant feedback can encourage learners to take risks and engage more actively with language tasks. Importantly, gamification does not replace pedagogical objectives but rather enhances them by framing learning activities in ways that feel purposeful and rewarding. Digital platforms have further expanded the possibilities of gamified learning by offering accessible and flexible tools that can be integrated into both face to face and blended learning environments.

2.3 Kahoot and Quizlet in ESP Contexts

Kahoot and Quizlet are among the most widely used digital tools in gamified language instruction. Kahoot functions primarily as a game -based response system that supports quizzes and formative assessment, promoting rapid recall, attention, and classroom interaction. Studies have shown that Kahoot can enhance enjoyment and focus, particularly in ESP classrooms where content may otherwise feel demanding or abstract (Licorish et al., 2018). Quizlet, in contrast, emphasizes self-paced vocabulary learning through flashcards, games, and testing modes, supporting repeated exposure and long term retention (Setiawan & Wiedarti, 2020).

While research has documented the effectiveness of these tools in general language and ESP contexts (Fuchs, 2014; Rajendran, 2022), studies focusing specifically on Medical English remain relatively limited, especially within Vietnamese higher education. Given the distinct cognitive demands of medical terminology and the professional orientation of EMP courses, further investigation is needed to understand how gamified tools function in this context. The present study addresses this gap by examining the pedagogical value of Kahoot and Quizlet in Medical English instruction at the University of Medicine and Pharmacy at Ho Chi Minh City, with particular attention to student engagement, motivation, and vocabulary learning.

3. METHODOLOGY

3.1 Teaching Context and Instructional Implementation

This study was carried out in two Medical English classes for second year medical students at University of Medicine and Pharmacy at Ho Chi Minh City, with a total of 60 participants. The Medical English courses aim

to develop students' foundational medical vocabulary, introductory clinical communication skills, and reading comprehension related to body systems, common diseases, and basic treatment procedures. Classes are conducted in a large group format, with each lesson lasting 90 minutes, which presents both opportunities and constraints for interactive language practice.

Gamified learning activities were integrated into regular classroom instruction over a four-week period. Rather than functioning as stand-alone activities, Kahoot and Quizlet were embedded into existing lesson structures to support lesson objectives. Each session typically began with a short Kahoot quiz consisting of five to ten questions. These quizzes were designed to activate prior knowledge, introduce new terminology, or review key concepts from previous lessons. Students participated either individually or in small teams, creating a balance between competition and collaboration. Following each quiz round, the instructor led brief whole class discussions to clarify meaning, address common errors, and highlight pronunciation, word formation, and appropriate contextual use of medical terms.

Quizlet was introduced as a complementary tool for consolidation and revision beyond classroom time. For each lesson, the instructor prepared vocabulary sets aligned with course content and shared them with students through the platform. Students were encouraged to engage with multiple Quizlet modes, including flashcards, matching activities, and self-testing exercises, according to their individual learning preferences. This approach allowed students to revisit terminology at their own pace while reinforcing repeated exposure and retrieval practice, which are essential for vocabulary retention in Medical English.

3.2 Research Design and Instruments

A mixed method research design was adopted to capture both measurable trends and students' personal learning experiences. Quantitative data were collected through a ten item Likert scale questionnaire administered at the end of the instructional period. The questionnaire focused on three key domains: learner engagement, learning motivation, and perceived vocabulary retention. Responses were recorded on a five-point scale ranging from strongly disagree to strongly agree, allowing for descriptive analysis of overall trends.

To complement the survey data, qualitative insights were gathered through open ended questions included in the same questionnaire. These items invited students to reflect on their experiences with gamified activities, perceived benefits of using Kahoot and Quizlet, and any challenges encountered during the learning process. The inclusion of qualitative feedback provided a deeper understanding of how students perceived the role of gamified tools in supporting their learning and participation.

3.3 Data Collection and Analysis

Data collection took place after four weeks of continuous integration of gamified activities. The questionnaire was completed anonymously to encourage honest and reflective responses. Quantitative data were analyzed descriptively by calculating mean scores and percentages of agreement for each survey item and domain. Qualitative responses were reviewed and categorized thematically to identify recurring patterns related to engagement, motivation, and vocabulary learning.

3.4 Ethical Considerations

Participation in the study was voluntary, and informed consent was obtained from all participants prior to data collection. Students were informed that their responses would not influence their course grades or academic evaluation. All data were anonymized and used solely for research purposes, in accordance with institutional ethical guidelines for educational research at the University of Medicine and Pharmacy at Ho Chi Minh City.

4. RESULTS

The results of the study reveal consistently positive student perceptions of gamified learning in Medical English classes, with both quantitative and qualitative data pointing to high levels of engagement, motivation, and perceived vocabulary retention. Overall, the findings suggest that the integration of Kahoot and Quizlet contributed to a more interactive and supportive learning environment, while also reinforcing key medical terminology in meaningful ways.

4.1 Quantitative Findings

Analysis of the survey data demonstrates strong approval of gamified activities across all measured domains.

Domain	Representative Item	Mean (1–5)	Agree/ Strongly Agree (%)
Engagement	"Kahoot and Quizlet make Medical English classes more enjoyable."	4.7	93%
Motivation	"I feel more motivated to participate when using gamified activities."	4.5	88%
Retention	"Quizlet helps me remember new medical terms more effectively."	4.4	85%
Collaboration	"Team competition in Kahoot increases my cooperation with peers."	4.6	90%
Overall Satisfaction	"I would like more gamified activities in future courses."	4.8	95%

Note: Scale = 1 (Strongly Disagree) – 5 (Strongly Agree)

Table 1. Results of Student Responses to Gamified Learning Tools

Engagement received the highest overall ratings, with a mean score of 4.7 on a five- point scale. A substantial majority of students, representing 93 percent of respondents, agreed or strongly agreed that the use of Kahoot and Quizlet made Medical English classes more enjoyable. This finding indicates that gamified activities were effective in sustaining attention and creating a more dynamic classroom atmosphere, even when dealing with complex and technical content.

Motivation was also rated highly, with a mean score of 4.5 and 88 percent of students expressing agreement that gamified learning increased their willingness to participate actively in class. Students reported feeling more inclined to answer questions, contribute during activities, and prepare for lessons when games were incorporated. These results suggest that the competitive and interactive elements of Kahoot, combined with the self-paced review opportunities provided by Quizlet, helped address common motivational challenges in Medical English instruction.

Perceived vocabulary retention yielded a mean score of 4.4, with 85 percent of participants indicating that Quizlet supported more effective memorization of medical terms. Students appeared to value the repeated exposure to vocabulary through flashcards, matching activities, and self-testing modes, which allowed them to reinforce learning beyond classroom time. Collaboration also emerged as a notable outcome, with team-based competition in Kahoot receiving a mean score of 4.6 and 90 percent agreement. These findings suggest that gamified tasks not only supported individual learning but also encouraged cooperation and shared responsibility among peers.

Overall satisfaction achieved the highest level of agreement, with a mean score of 4.8 and 95 percent of students expressing a desire for more gamified activities in future courses. This finding indicates that students view gamified learning as a valuable and sustainable element of Medical English teaching, rather than a temporary approach.

In summary, survey results show very positive student responses to gamified activities in Medical English classes. Engagement was rated highly, with most students reporting that Kahoot and Quizlet made lessons more enjoyable and helped maintain attention even when learning complex terminology. Motivation was also strong, as students felt more willing to participate, answer questions, and prepare for class when game elements were included. Perceived vocabulary retention received similarly favorable ratings, with many students indicating that Quizlet's repeated practice formats supported effective memorization of medical terms beyond class time. Collaboration was another important benefit, as team-based competition in Kahoot encouraged cooperation and peer interaction. Overall satisfaction was the highest rated area, with nearly all participants expressing a desire for more gamified activities in future courses. Taken together, these findings suggest that gamified learning not only enhances enjoyment but also supports active participation, memory, teamwork, and sustained interest, making it a valuable and practical approach for Medical English instruction.

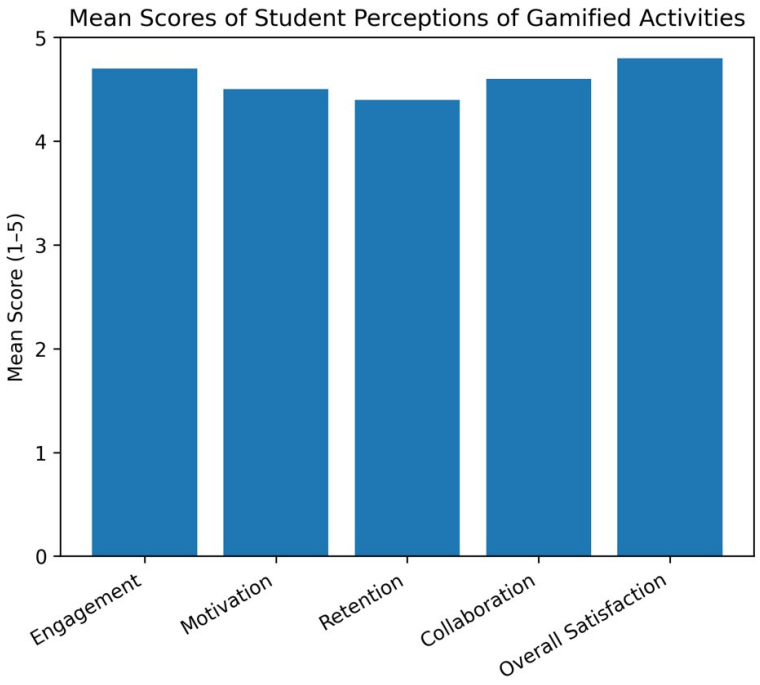

Figure 1. Student Ratings of Kahoot and Quizlet in Medical English Instruction

4.2 Qualitative Findings

Qualitative analysis of open-ended responses further enriches the quantitative results and provides insight into students' learning experiences. Three recurring themes emerged from the data: increased enjoyment with reduced anxiety, more active participation, and greater confidence in medical vocabulary use.

Many students described the classroom environment during gamified activities as more relaxed and supportive compared to traditional lessons. Several noted that the game-based format reduced their fear of making mistakes, allowing them to focus more on learning rather than on performance. One student commented that the activities made the class feel "less stressful and more like a challenge than a test," while another observed that learning medical terms through games felt "more natural and less forced."

Active participation was also frequently mentioned. Students reported that Kahoot encouraged them to stay attentive and respond quickly, especially during team-based competitions. The immediate display of correct answers and explanations was seen as particularly helpful in reinforcing understanding. As one student explained, seeing feedback right away helped clarify mistakes and made the vocabulary easier to remember.

In addition, many students emphasized the role of Quizlet in building confidence with medical terminology. The ability to review terms independently and repeatedly was perceived as especially valuable. One student noted that Quizlet allowed them to study "at my own speed until I really remembered the words," while another highlighted that combining classroom games with self- study made vocabulary learning more effective and enjoyable.

Taken together, the qualitative findings support the survey results and illustrate how gamified learning tools can transform vocabulary learning from a passive task into an engaging and confidence building experience in Medical English education.

5. DISCUSSION

This section discusses the findings of the study in relation to the research objectives and situates them within the broader literature on gamified learning and English for Medical Purposes. Drawing on both quantitative and qualitative evidence, the discussion examines how the integration of Kahoot and Quizlet influenced student engagement, motivation, vocabulary retention, and peer interaction in Medical English classrooms. Particular attention is given to the pedagogical value of gamification in addressing the challenges associated with teaching specialized medical vocabulary, as well as to the practical implications and limitations observed during implementation. Through this analysis, the study aims to clarify how gamified tools can meaningfully support

learning processes while complementing, rather than replacing, established instructional practices in medical education contexts.

5.1 Gamified Learning and Student Engagement

The findings of this study indicate that the integration of gamified learning tools, specifically Kahoot and Quizlet, had a substantial positive impact on student engagement in Medical English courses. Students consistently reported higher levels of enjoyment and attentiveness when game-based activities were incorporated into lessons. This outcome is particularly noteworthy in the context of Medical English, where dense terminology and cognitively demanding content often lead to learner fatigue and passive participation. The interactive and competitive elements embedded in Kahoot appeared to create a learning environment that felt less intimidating and more inviting, encouraging students to take part without fear of making mistakes.

These results align with existing research suggesting that gamification can lower affective barriers and foster a low-pressure atmosphere conducive to language production. By shifting the focus from accuracy driven performance to participation and exploration, gamified activities helped students engage more willingly with complex medical content. This is especially relevant in large classes, where individual speaking opportunities are limited and students may otherwise remain silent.

5.2 Motivation and Vocabulary Retention in Medical English

Beyond engagement, the findings highlight the role of gamified tools in enhancing learner motivation and perceived vocabulary retention. Students reported feeling more motivated to prepare for lessons and review terminology independently, particularly through the use of Quizlet. The availability of multiple practice modes allowed learners to revisit medical terms repeatedly, supporting active recall and long-term consolidation. This repeated exposure is critical in Medical English, where vocabulary mastery requires not only memorization but also familiarity with form, meaning, and usage.

Kahoot and Quizlet served complementary instructional purposes. Kahoot functioned effectively as a pre lesson or in class tool to activate prior knowledge and stimulate immediate involvement, while Quizlet extended learning beyond classroom boundaries through self- paced practice. Together, these tools created a coherent learning cycle that connected in class interaction with autonomous study. Such an approach supports sustained vocabulary development rather than short term memorization, addressing a long-standing challenge in ESP instruction.

5.3 Peer Interaction and Collaborative Learning

Another important outcome of the study relates to peer interaction and collaboration. Team based activities in Kahoot encouraged students to work together, discuss answers, and negotiate meaning, thereby reinforcing both language learning and social interaction. Students reported that learning in teams made medical terminology more memorable and less monotonous, while also strengthening their sense of belonging within the class.

From a theoretical perspective, these findings resonate with social constructivist views of learning, which emphasize knowledge construction through interaction, feedback, and shared problem solving. Gamified learning did not replace teacher guidance but complemented it by creating spaces where students could learn from one another. This collaborative dimension is particularly valuable in Medical English, as professional communication in healthcare settings relies heavily on teamwork and clear information exchange.

5.4 Pedagogical Implications and Implementation Challenges

While the overall findings are positive, several practical challenges were identified. Uneven participation levels were observed, with some students being more competitive or confident than others. In addition, occasional technical issues, such as unstable internet connections, disrupted the flow of activities. These challenges underscore the importance of careful task design, clear instructions, and flexible classroom management when implementing gamified learning.

Teacher readiness also emerged as a key consideration. Designing effective quizzes and vocabulary sets requires pedagogical planning to ensure alignment with learning objectives rather than superficial gameplay. Nevertheless, the simplicity and accessibility of Kahoot and Quizlet suggest that, with appropriate training and experience, these tools can be integrated without excessive instructional burden.

Overall, the findings suggest that the benefits of gamified learning outweigh its limitations. By enhancing engagement, supporting vocabulary retention, and fostering collaboration, gamified tools offer a scalable and sustainable approach for Medical English instruction in Vietnamese higher education. When used strategically,

they can transform vocabulary learning into an active, motivating, and professionally relevant experience that aligns well with the goals of English for Medical Purposes.

6. CONCLUSION AND RECOMMENDATIONS

This study examined the pedagogical value of gamified learning in Medical English instruction through the integration of Kahoot and Quizlet at the University of Medicine and Pharmacy at Ho Chi Minh City. The findings demonstrate that carefully designed gamified activities can significantly enhance student engagement, learning motivation, and perceived retention of medical vocabulary. By transforming vocabulary learning from a predominantly passive activity into an interactive process characterized by participation, repetition, and immediate feedback, these tools contributed to a more supportive learning environment in which students felt more confident engaging with specialized medical terminology.

In addition to their positive impact on learners, Kahoot and Quizlet proved to be practical and accessible instructional tools for ESP instructors. Their user-friendly design enabled smooth classroom integration without imposing substantial technical demands on teaching staff. Notably, the two platforms fulfilled complementary pedagogical roles. Kahoot promoted real time interaction, collaboration, and focused attention during classroom activities, whereas Quizlet facilitated autonomous learning and ongoing revision beyond scheduled class hours. Together, they helped establish continuity between guided instruction and independent practice, an important consideration in Medical English courses with limited instructional time.

From a broader pedagogical standpoint, the results indicate that gamified learning is well suited to the needs of medical students, who must master complex terminology while simultaneously developing linguistic accuracy, fluency, and professional confidence. When implemented purposefully, gamification does not diminish academic rigor. Instead, it offers structured opportunities for repeated exposure and contextualized language use, both of which are essential for sustainable learning. Students' positive perceptions further suggest that gamified activities are most effective when adopted as an integral component of course design rather than as a short-term motivational technique.

Based on the findings of this study, the following recommendations are proposed.

6.1. Curriculum integration

Gamified learning tools such as Kahoot and Quizlet should be systematically incorporated into Medical English curricula, particularly within blended or hybrid learning models. Their inclusion can help balance in class interaction with out of class practice, thereby maximizing learning opportunities within constrained contact hours.

6.2. Instructional design

Instructors should prioritize the development of games that are closely aligned with course objectives and relevant clinical contexts. Emphasis should be placed on meaningful and contextualized language use, ensuring that gamified activities support deeper understanding rather than surface level memorization of medical terms.

6.3. Pedagogical alignment

Gamification should be used in conjunction with other instructional approaches, including case -based learning, role plays, and reflective tasks. This integrated approach can strengthen communicative competence and clinical reasoning while maintaining student engagement.

6.4. Institutional support

At the institutional level, professional development initiatives are recommended to support instructors in designing and implementing effective gamified content. Training workshops can enhance pedagogical confidence and promote more consistent and purposeful use of digital tools in ESP instruction.

Future research may build on the present findings by exploring the long-term effects of gamified learning on vocabulary retention and clinical communication skills over multiple semesters. Further investigations comparing different healthcare disciplines or examining the potential of emerging AI enhanced gamified platforms would also contribute to a more comprehensive understanding of digital innovation in medical ESP education.

In conclusion, gamified learning represents a pedagogically sound and contextually appropriate direction for Medical English instruction, particularly in settings where learner engagement, practical language use, and instructional efficiency are central concerns. When guided by clear learning objectives and integrated with

complementary teaching strategies, gamification can enrich the learning experience and better equip future healthcare professionals to meet the linguistic demands of their discipline.

7. References

Bosher, S., & Smalkoski, K. (2002). From needs analysis to curriculum development: Designing a course in health care communication for immigrant students in the USA. *English for Specific Purposes, 21*(1), 59–79.

Caponetto, I., Earp, J., & Ott, M. (2014). Gamification and education: A literature review. In *Proceedings of the 8th European Conference on Games Based Learning* (Vol. 1, pp. 50–57). Academic Conferences International.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227–268.

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: Envisioning Future Media Environments* (pp. 9–15). ACM.

Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge University Press.

Fuchs, B. (2014). The writing is on the wall: Using Kahoot! to gamify learning. *Library Hi Tech News, 31*(9), 7–9.

Lee, J. J., & Hammer, J. (2011). Gamification in education: What, how, why bother? *Academic Exchange Quarterly, 15*(2), 146–151.

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.

Rajendran, T. (2022). Gamification in ESP classrooms: Enhancing learner engagement through digital tools. *Journal of English for Academic and Specific Purposes, 9*(2), 45–58.

Setiawan, H., & Wiedarti, P. (2020). The effectiveness of Quizlet for vocabulary mastery. *Journal of English Language Teaching and Linguistics, 5*(1), 15–25.

Warschauer, M. (2000). The changing global economy and the future of English teaching. *TESOL Quarterly, 34*(3), 511–535.

Zainuddin, Z., Shujahat, M., Haruna, H., & Chu, S. K. W. (2020). The role of gamified e-quizzes on student learning and engagement: An interactive learning perspective. *Computers & Education, 145*, 103729.