Gamification in English Language Teaching: ICT-Driven Engagement Strategies for 21st Century Learners

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Abstract

The use of technology in English Language Teaching (ELT) has become an integral part of contemporary educational practices, particularly in supporting student engagement and improving learning outcomes. Among various technology-based approaches, gamification has attracted considerable attention due to its potential to integrate game elements such as points, badges, challenges, and feedback into instructional activities. This study adopts a qualitative library research approach, employing tehmatic content analysisi to review 27 peer-reviewed journal articles published between 2020 and 2025. The selected literature was analyzed to examine how gamification functions as an ICT-based engagement strategy for 21st-century learners in ELT contexts. The review focuses on the role of gamified learning in enhancing learner motivation, engagement, and the development of English language skills, including speaking, listening, reading, and writing. The findings suggest that gamification contributes positively to learner motivation and participation when it is pedagogically designed and aligned with learning objectives. Digital platforms such as Kahoot, Quizizz, and Duolingo are frequently reported as effective tools for facilitating gamified learning. The study concludes that the integration of gamification into ELT curricula can support more meaningful and engaging learning experiences that respond to the characteristics of contemporary learners.

Keywords: Gamification; English Language Teaching, ICT Integration, Engagement

Introduction

The integration of technology into pedagogy has, over the last few years, both changed traditional teaching practices and created new ways to enhance student engagement (Huriati et al., 2023). Teaching English to learners who are digital natives poses unique challenges. As much as these students embrace technology in their personal lives, they struggle with academic digital literacy skills and maintaining interest in learning environments(Rokhyati & Ramadhani, 2022). Students may be comfortable using technology, it does not imply that they possess the skills to apply it effectively in academic context.

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ICT engagement strategies refre to instructional approaches that make purposeful use of digital technologies to support active learner involevement in learning process (Anggrainy et al., 2024). In the context of English language teaching, the strategies are not limited to the use of technology as a delivery tool, but emphasize how digital resirues are designed and implemented to encourage participation, interaction, and sustained attention (Sari et al., 2024). ICT-based engagement strategies often involve interactive platforms, immediate feedback, collaborative digital taks, and flexible learning environments that alow learner to take a more active role in their learning. When Ict-based strategies are combined with gamification, learning becomes more engaging and enjoyable. Students are more motivated, actively involved, and the learning activieties can better adapt to their needs, especially in classrooms that rely on digital technology.

Gamification is one of the most innovative approaches. Gamification refers to the application of game design mechanics in areas outside games to promote motivation and engagement (Sebastian et al., 2011). Generally, gamification is the use of game components and principles in non-game contexts. In language education especially, gamification has been proven to significantly enhance learner motivation, participation, and even academic achievement. There are special challenges in Teaching English as a second or foreign language(Fauziningrum et al., 2023). Students often struggle to stay motivated and interested as language learning tends to be rather tedious or overwhelming(Ningsih & Sari, 2021). In contrast, the incorporation of gamified approaches in English language teaching (ELT) certainly can make learning experiences more interactive and engaging. By applying concepts such as challenges, points, and badges, gamification generates an active learning environment that can engage students and motivate them to learn actively(Reprint & Hou, 2023).

The originality of the present study lies in its focused investigation of gamification in foreign language teaching, an area that has not been adequately researched, particularly within inclusive schools. Current studies have shed light on the substantial impact of gamification on learner engagement and motivation. A systematic review indicated that gamified learning experiences positively affect learners' intrinsic motivation and engagement across various learning environments(Hamari et al., 2019). But while there are many studies highlighting the benefits of gamification, there is a lack of specific research into the use of gamification for learning languages, particularly within non-Western societies where there is little access to educational material(Yin et al., 2016). It is important to address this gap because traditional methods of language instruction are no longer sufficient to meet the diverse needs of today's learners. Such approaches often result in disengagement, especially among students who perceive the material as uninteresting or disconnected from their own experiences(Khaleel et al., 2020). Teachers can create more inclusive and responsive environments through the utilization of gamification strategies that cater to diverse learning styles and preferences. The aim of this research is to identify effective gamification elements that enhance student engagement and build language skills, including speaking, listening, reading, and writing. Digital platforms are the hub to facilitate gamification in learning. There are a number of online applications and tools that allow teachers to incorporate gamified elements into their teaching with ease. For instance, tools like Kahoot, Quizlet, and Duolingo have gained greater popularity due to their ability to engage students by using game-like features such as quizzes and language practice exercises (Balbaa & Abdurashidova, 2023).

This study investigate the effects of gamification in English Language Teaching (ELT) by reviewing the relevant literature. It aims to outline not only the potential benefits such as increased enggagement, participation, and persistance but also the common challenges and limitations that can reduce its effectiveness when the design is weak or classroom context is not considered. Understanding the role of gamification in language learning can help teachers, curriculum designers, and education authorities make more informed decisions to improve educational outcomes. A critical gap in the current literature, emphasizing the need for more empirical research that explores the long-term impact of gamification on learning performance, as existing studies often focus only on short-term engagement outcomes(Glover, Glover, 2013). This study attempted to fill this gap by presenting a critical overview of how gamification has been integrated into English curricula, focusing specifically on its influence on student motivation and language skills mastery. Besides, this study contributed to the overall discourse on effective pedagogical approaches in the modern era of the digital age.

Method

This study employed a qualitative library study design. It was designed to collect, examine, and synthesize existing scholarly literature in order to explore the use of gamification in English Language Teaching (ELT). The design was used in an attempt to provide a detailed discussion of how gamification has been employed as an ICT-based motivation strategy in the language classroom, specifically for 21st-century learners.(S. Zhang & Hasim, 2023).

Data sources for this research were peer-reviewed journals, proceedings of conferences, and books written by scholars and published between 2020-2025. These sources were obtained from reputable academic databases such as Web of Science, SpringerLink, Taylor & Francis, and Google Scholar. Strict inclusion criteria were employed to ensure quality and applicability of the literature: The documents must be on gamification in schools, in this case, ELT. The literature must offer empirical findings, theoretical foundations, or comprehensive reviews of gamification, motivation, ICT integration, or student motivation. The sources must be published in English and reviewed. 27 sources of scholarly literature met these criteria and were thus included in the final analysis. Thematic content analysis was employed to examine the data, with recurring patterns, themes, and conceptual frameworks determined across the selected literature (Doomun & Greunen, 2022).

The data analysis was thematic content analysis with the library research design. To ensure maximum academic strength, the validity of each source was measured based on the impact factor of the journal, citation index, and relevance of findings towards research goals. Using systematic review and synthesis of the existing literature, this method provides integrative and critical summary of effectiveness of gamification interventions on language learning outcomes. This library research approach enables triangulation of evidence from different sources, permitting a broad yet focused understanding of the intersection of gamification, language teaching, and digital technologies. It also enables the establishment of grounds for the development of pragmatic pedagogic recommendations as well as avenues of future research in ELT and ICT integration. The themes emerged in this study were (1) gamification design and gamification elements, (2) digital language learning platforms, (3) learner motivation and engagement, and (4) gamification and language skill development.

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Results and Discussion

The analysis of 27 scholarly sources published between 2020 and 2025 reveals four major themes illustrating how gamification significantly transforms English Language Teaching (ELT) practices for 21st-century learners: (1) gamification mechanics and instructional design, (2) platform-based digital gamification, (3) learner engagement and motivation, and (4) impact on language skill

development. Each theme is substantiated with current empirical findings and theoretical discussions.

Gamification Mechanics and Instructional Design in ELT

The success of gamification in ELT is closely tied to the deliberate integration of game elements that align with pedagogical objectives. A consistent finding across multiple studies is that components such as points, levels, badges, progress bars, and leaderboards increase learner involvement when they are coupled with clear educational targets (Labibah, 2024). According to (La Cruz et al., 2023), the effectiveness of gamified learning environments is maximized when instructional design follows the Octalysis Framework, which emphasizes core motivational drives beyond reward mechanics.

Further, effective gamification design includes personalization, adaptive feedback, and meaningful narratives that support learner autonomy and identity development (X. Li & Chu, 2021). This is consistent with findings from (Khoshnoodifar et al., 2023) who argue that gamified systems must be supported by learning theories like constructivism or cognitive load theory to ensure deeper and more meaningful engagement.

Platform-Based Digital Gamification Tools

Gamification is most commonly implemented via digital platforms that facilitate real-time interaction and feedback. Studies demonstrate the increasing popularity and effectiveness of tools such as Kahoot, Quizizz, Wordwall, Duolingo, and Classcraft in various ELT settings. (Sihite & Hamzah, 2025) found that the use of Quizizz significantly improved student participation and test scores in grammar and reading comprehension.

Likewise, (Rouabhia & Kheder, 2024) concluded that the integration of Duolingo in formal classroom settings resulted in statistically significant improvement in vocabulary acquisition, especially among beginners. Meanwhile, research by (Jannah et al., 2023) in Indonesian higher education contexts reported that gamification through Google Form quizzes with embedded scoring and feedback fostered independent learning and increased time-on-task.

Nevertheless, the studies highlighted that the effectiveness of the platforms in education depends on the digital teaching skills of educators and teachers'capacity to integrate game elements with educational objectives (Wulantari et al., 2023). Teachers who merely adopt platforms without a strong pedagogical foundation tend to achieve limited results.

Learner Motivation and Engagement in Gamified ELT

A dominant theme in recent literature is the positive influence of gamification on learner motivation, particularly when intrinsic motivators are activated. Multiple studies report that gamification stimulates self-determination elements autonomy, competence, and, but

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contextualized in digital environments (L. Li et al., 2024). (Wulantari et al., 2023)found that students involved in gamified vocabulary learning via mobile applications showed enhanced engagement and perseverance in task completion, even when confronted with linguistic difficulties. Meanwhile, (Ho et al., 2021) demonstrated that gamification fostered peer collaboration, especially in group-based challenges and leaderboard competitions.

Interestingly, the increasing motivation was not merely short-term. According to (X. Li et al., 2022), students who were consistently involved in gamified learning demonstrated long term improvement. Over time, students became more independent in their learning and developed better self regulation skills. This suggests that gamification not only helps students perform better in the short term but also encourages studnets to take control of tehir own learning, making studnets more independent. From a broader research perspective, studies on learner motivation and engagement in gamified English Langauge teaching (ELT) have been conducted predominantly at the seondary and tertiary education levels. Most empirical research focuses on higher education contexts, where learners generally possess higher levels of digital literacy and learning autonomy, enabling them to engage more effectively with gamified learning environments. Research at the secondary school level is also well represented, particularly in studeies addressing vocabulary learning and classroom engagement. In contrast, primary education remains the least researched level in the application of gamification in ELT, suggesting a clear research gap regarding how gamified learning environments can be effectively designed for younger language learners.

Development of English Language Skills through Gamification

A major contribution of recent research is the demonstration that gamification has tangible, skill-specific benefits across the four language domains. For example, speaking and listening skills were notably improved when learners engaged with role-playing games and interactive storytelling platforms such as Classcraft and virtual escape rooms (Azmi et al., 2025; Rouabhia & Kheder, 2024). In terms of reading comprehension, gamified digital texts with integrated quizzes, badges, and real-time scaffolding were reported to increase reading fluency and comprehension accuracy (Salim et al., 2025). Moreover, writing skills were positively influenced when gamified tools incorporated immediate grammar feedback, peer rating, and reflective journaling challenges (Mohamad et al., 2024). Several studies have highlighted that gamification supports differentiation learners at various proficiency levels are better accommodated through adaptive difficulty, branching scenarios, and feedback loops. Gamification not only meet the diverse learning needs of students but also play a key role in creating a more inclusive and supportive classroom environment(Balbaa & Abdurashidova, 2023; Rosero & Inga, 2025; Z. Zhang & Huang, 2024).

Conclusion

Gamification can support EFL instruction when it is used as a planned teaching approach rather than an added fun activity. As shown in the studies reviewed, game features such as points, progress indicators, used to guide revision. In practice, plathforms like Quizizz, Kahoot, and Duolingo often work well because they make formative assessment easier to manage. The features of platforms allow learners to respond, receive immediate feedback, and repeat task until they improve accuracy. however, the literature also demonstrated that gamification is not

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automatically effective. The results depends on several factors, including the quality of design, teacher facilitation, and how learner experience competition. Public rankings and leaderboard based-competion can motivated some students, yet they may discourage others who repetedly see low scores, and this can shift attention from language growth to score chasing. For this reason, gamified actvities are more defensible when they prioritize mastery, personal progress, and supportive feedback, while allowing challenge and interaction. Future research should move beyond short interventions and examine whether motivational benefits and language gains remain stable over time across different skills and classroom context.

Reference

Azmi, F. U., Navarathnaraja, K., Mohd Ali, S. M., & Hanim Ismail, H. (2025). Gamification and ESL Learning: Enhancing Language Skills through Literary-Themed Escape Room Activities. *Forum for Linguistic Studies*, *7*(12). https://doi.org/10.30564/fls.v7i12.11424

Balbaa, M., & Abdurashidova, M. (2023a). Enhancing Student Engagement and Learning Outcomes Through Gamification in Education. *Technology and Education* , *May*.

Balbaa, M., & Abdurashidova, M. (2023b). Enhancing Student Engagement and Learning Outcomes Through Gamification in Education. *Technology and Education* , *May*. https://www.researchgate.net/publication/376392314

Doomun, R., & Greunen, D. Van. (2022). A qualitative investigation of student experience in a gamified course at the Open University of Mauritius. *South African Computer Journal*, *34*(2), 94–106. https://doi.org/10.18489/sacj.v34i2.1085

Fauziningrum, E., Sari, M. N., Rahmani, S. F., Riztya, R., Syafruni, S., & Purba, P. M. (2023). Strategies Used by English Teachers in Teaching Vocabulary. *Journal on Education*, *6*(1), 674–679. https://doi.org/10.31004/joe.v6i1.2981

Glover, Glover, I. (2013). Play As You Learn : Gamification as a Technique for Motivating Learners. Proceedings of World Conference on Educational Multimedia. *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications*, *October*, 1999–2008.

Hamari, J., Koivisto, J., & Sarsa, H. (2019). Does Gamification Work? *Proceedings of the Annual Hawaii International Conference on System Sciences*, *January*(6–9), 3025–3034.

Ho, J. C. S., Hung, Y. S., & Kwan, L. Y. Y. (2021). The impact of peer competition and collaboration on gamified learning performance in educational settings: a Meta-analytical study. *Education and Information Technologies 2021 27:3*, *27*(3), 3833–3866. https://doi.org/10.1007/S10639-021-10770-2

Huriati, N., Fitriani, N., Kusumaning Tyas, N., Rofi, A., Nurmalia Sari, M., Rowo, J., Mijen, K., Semarang, K., Tengah, J., Muhammadiyah Sungai Penuh, S., Martadinata No, J. R., Sungai Penuh, P., Sungai Penuh, K., Sungai Penuh, K., Sains dan Teknologi Komputer, U., Majapahit No, J., & Kidul Semarang, P. (2023). The Role Of Artificial Intelligence (AI) In Developing English Language Learner's Communication Skills. *Journal on Education*, *06*(01), 750–757.

Jannah, R., Nor, H., & Asfihana, R. (2023). The implementation of gamification to teach grammar in higher education. *ELT Forum: Journal of English Language Teaching*, *12*(2), 122–133. https://doi.org/10.15294/elt.v12i2.64683

Khaleel, F. L., Ashaari, N. S., & Wook, T. S. M. T. (2020). The impact of gamification on students learning engagement. *International Journal of Electrical and Computer Engineering*, *10*(5), 4965–4972. https://doi.org/10.11591/ijece.v10i5.pp4965-4972

Khoshnoodifar, M., Ashouri, A., & Taheri, M. (2023). Effectiveness of Gamification in Enhancing Learning and Attitudes: A Study of Statistics Education for Health School Students. *Journal of Advances in Medical Education & Professionalism*, *11*(4), 230–239. https://doi.org/10.30476/JAMP.2023.98953.1817

La Cruz, K. M. L. De, Noa-Copaja, S. J., Turpo-Gebera, O., Montesinos-Valencia, C. C., Bazán-Velasquez, S. M., & Pérez-Postigo, G. S. (2023). USE OF GAMIFICATION IN ENGLISH LEARNING IN HIGHER EDUCATION: A SYSTEMATIC REVIEW. *Journal of Technology and Science Education*, *13*(2), 480–497. https://doi.org/10.3926/jotse.1740

Labibah, H. F. (2024). Gamification in English Learning: Strategies to Increase Student Motivation and Engagement in the Digital Age. *Journal Corner of Education, Linguistics, and Literature*, *4*(001), 848–857. https://doi.org/10.54012/jcell.v4i001.565

Li, L., Hew, K. F., & Du, J. (2024). Gamification enhances student intrinsic motivation, perceptions of autonomy and relatedness, but minimal impact on competency: a meta-analysis and systematic review. *Educational Technology Research and Development 2024 72:2*, *72*(2), 765–796. https://doi.org/10.1007/S11423-023-10337-7

Li, X., & Chu, S. K. W. (2021). Exploring the effects of gamification pedagogy on children's reading: A mixed-method study on academic performance, reading-related mentality and behaviors, and sustainability. *British Journal of Educational Technology*, *52*(1), 160–178. https://doi.org/10.1111/BJET.13057;PAGEGROUP:STRING:PUBLICATION

Li, X., Xia, Q., Chu, S. K. W., & Yang, Y. (2022). Using Gamification to Facilitate Students' Self-Regulation in E-Learning: A Case Study on Students' L2 English Learning. *Sustainability (Switzerland)*, *14*(12). https://doi.org/10.3390/su14127008

Mohamad, M., Ibrahim, N. A. E., Nasaruddin, N., & Zakaria, N. Y. K. (2024). The Impact of Gamified Learning Techniques in Improving Writing Skills outcomes: A Systematic Review. *International Journal of Academic Research in Business and Social Sciences*, *14*(8). https://doi.org/10.6007/ijarbss/v14-i8/22623

Ningsih, P. E. A., & Sari, M. N. (2021). Are Learning Media Effective in English Online Learning?: The Students' and Teachers' Perceptions. *Tarbawi : Jurnal Ilmu Pendidikan*, *17*(2), 173–183. https://doi.org/10.32939/tarbawi.v17i2.1012

Reprint, S. I., & Hou, H. T. (2023). Game-Based Learning and Gamification for Education. In *Game-Based Learning and Gamification for Education*. https://doi.org/10.3390/books978-3-0365-7515-5

Rokhyati, U., & Ramadhani, R. (2022). How digital immigrants differ from digital native teachers in implementing technology in the classroom. *Teaching English as a Foreign Language Journal*, *1*(1), 23–29. https://doi.org/10.12928/tefl.v1i1.166

Rosero, X., & Inga, E. (2025). Transforming Inclusive Education Through Gamification and Active Learning Strategies. *Information 2025, Vol. 16, Page 753*, *16*(9), 753. https://doi.org/10.3390/INFO16090753

Rouabhia, R., & Kheder, K. (2024). Using Duolingo in Teaching and Learning Vocabulary: A Systematic Review. *Indonesian Journal of English Language Studies (IJELS)*, *10*(2), 91–107. https://doi.org/10.24071/ijels.v10i2.8873

Salim, M., Sukarno, S. M., Chaudhuri, J., Titania, F. N., Handayani, R., Haq, Z., & Maujud, I. (2025). *Using Gamified Quizzes to Enhance Students' English Reading Comprehension Skills*. *33*(1), 125–142. https://doi.org/10.21831/diksi.v32i2

Sebastian, Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining "gamification." *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments, MindTrek 2011*, *September*, 9–15. https://doi.org/10.1145/2181037.2181040

Sihite, & Hamzah. (2025). *View of THE EFFECTIVENESS OF QUIZIZZ MEDIA TO IMPROVE STUDENT'S READING SKILLS IN NARRATIVE TEXT FOR ELEVENTH GRADE*. https://journalcenter.org/index.php/inovasi/article/view/3915/3076

Wulantari, N. P., Rachman, A., & Sari, M. N. (2023). *View of The Role Of Gamification In English Language Teaching: A Literature Review*. Journal on Education. https://jonedu.org/index.php/joe/article/view/3328/2793

Yin, P. Y., Chuang, K. H., & Hwang, G. J. (2016). Developing a context-aware ubiquitous learning system based on a hyper-heuristic approach by taking real-world constraints into account. In *Universal Access in the Information Society* (Vol. 15, Issue 3). https://doi.org/10.1007/s10209-014-0390-z

Zhang, S., & Hasim, Z. (2023). Gamification in EFL/ESL instruction: A systematic review of empirical research. *Frontiers in Psychology*, *13*(January), 1–12. https://doi.org/10.3389/fpsyg.2022.1030790

Zhang, Z., & Huang, X. (2024). Exploring the impact of the adaptive gamified assessment on learners in blended learning. *Education and Information Technologies*, *29*(16), 21869–21889. https://doi.org/10.1007/s10639-024-12708-w