



Improving Students' Reading Comprehension of Descriptive and Narrative Texts Through Canvas-Based Gamification

Desty Febria^{1*}, Inne Dasilva Angel² 

^{1,2} English Language Education, Universitas Internasional Batam, Batam, Indonesia

E-mail addresses: desty@uib.ac.id (corresponding author)

ARTICLE INFO

Article history:

Received May 30, 2026

Revised June 07, 2026

Accepted June 08, 2026

Available online June 13, 2026

Kata Kunci :

Pemahaman Membaca, Canvas LMS, Gamifikasi, Teks Deskriptif, Teks Naratif

Keywords:

Reading Comprehension, Canvas LMS, Gamification, Descriptive Text, Narrative Text

ABSTRAK

Pemahaman membaca merupakan salah satu keterampilan penting dalam pembelajaran bahasa Inggris. Namun, banyak siswa masih mengalami kesulitan dalam memahami kosakata, mengidentifikasi informasi rinci, serta memahami teks deskriptif dan naratif. Penelitian ini bertujuan untuk meningkatkan kemampuan pemahaman membaca siswa melalui penerapan gamifikasi berbasis Canvas Learning Management System (LMS). Penelitian ini menggunakan metode Penelitian Tindakan Kelas (PTK) yang melibatkan 37 siswa kelas X di salah satu sekolah menengah atas negeri di Batam. Penelitian dilaksanakan dalam dua siklus yang terdiri atas tahap perencanaan, tindakan, observasi, dan refleksi. Strategi gamifikasi yang diterapkan dalam Canvas meliputi pemberian poin, kuis interaktif, dan umpan balik langsung (direct feedback) untuk meningkatkan keterlibatan dan motivasi siswa dalam kegiatan membaca. Data dikumpulkan melalui tes pemahaman membaca, lembar observasi, dan catatan lapangan. Hasil penelitian menunjukkan adanya peningkatan yang signifikan pada kemampuan pemahaman membaca siswa. Nilai rata-rata meningkat dari 64,27 pada Siklus I menjadi 74,11 pada Siklus II, yang menunjukkan peningkatan sebesar 15,31%. Selain itu, persentase siswa yang berada pada kategori Sangat Baik meningkat dari 8,11% menjadi 51,35%. Hasil observasi juga menunjukkan bahwa siswa menjadi lebih aktif, terlibat, dan termotivasi dalam kegiatan membaca melalui penggunaan fitur-fitur gamifikasi yang terintegrasi dalam Canvas LMS. Oleh karena itu, gamifikasi berbasis Canvas dapat menjadi strategi pembelajaran yang efektif untuk meningkatkan kemampuan pemahaman membaca siswa terhadap teks deskriptif dan naratif dalam pembelajaran bahasa Inggris.

ABSTRACT

Reading comprehension is one of the essential skills in English language learning. However, many students still encounter difficulties in understanding vocabulary, identifying detailed information, and comprehending descriptive and narrative texts. This study aimed to improve students' reading comprehension skills through the implementation of Canvas-based gamification. The study employed a Classroom Action Research (CAR) design involving 37 tenth-grade students at a public senior high school in Batam. The research was conducted in two cycles, consisting of planning, action, observation, and reflection stages. The gamification strategies implemented in Canvas included the use of points, interactive quizzes, and direct feedback to enhance students' engagement and motivation in reading activities. Data were collected through reading comprehension tests, observation sheets, and field notes. The findings revealed a significant improvement in students' reading comprehension skills. The mean score increased from 64.27 in Cycle I to 74.11 in Cycle II, representing a 15.31% improvement. In addition, the percentage of students categorized as Very Good increased from 8.11% to 51.35%. The observation results also indicated that students became more active, engaged, and motivated in reading activities through the integration of gamification features within the Canvas Learning Management System (LMS). Therefore, Canvas-based gamification can serve as an effective instructional strategy for improving students' reading comprehension of descriptive and narrative texts in English language learning.

1. INTRODUCTION

Reading comprehension is one of the fundamental skills in English as a Foreign Language (EFL) learning because it enables students to understand information, expand vocabulary, and develop overall language proficiency (Nussy & Pekpekay, 2024). In addition to supporting language development, reading encourages students to interpret, analyze, and evaluate written information critically (Le & Nguyen, 2024). In secondary school English instruction, students are frequently required to comprehend descriptive and narrative texts. Descriptive texts demand the ability to identify detailed information and specific characteristics, whereas narrative texts require students to understand plot development, characters, settings, and moral values (Baker et al., 2023). Therefore, effective reading comprehension is essential for students' academic success in English learning (Anaktototy & Lesnussa, 2022; Vrhovec & Soršak, 2024).

Despite its importance, many EFL learners continue to experience difficulties in reading comprehension (Ramadhianti & Somba, 2023). Limited vocabulary mastery often prevents students from understanding important information and interpreting textual meaning accurately (Machfudi & Afidah, 2022). Furthermore, students frequently demonstrate low motivation toward reading activities, particularly when instruction relies on traditional teacher-centered approaches. Preliminary observations conducted at a public senior high school in Batam revealed similar challenges. Many students experienced difficulties in understanding vocabulary, identifying detailed information in descriptive texts, and comprehending narrative texts. In addition, students showed limited participation and engagement during reading activities. These findings indicate the need for an instructional strategy that can simultaneously improve reading comprehension and learning motivation (Asnawi et al., 2025; Azwar et al., 2024).

One approach that has gained increasing attention is gamification, which refers to the integration of game elements such as points, badges, rewards, challenges, and feedback into learning activities. Previous studies have reported that gamification can increase students' motivation, engagement, and academic achievement. In this study, gamification was implemented through Canvas LMS, a digital learning platform that provides features such as online quizzes, progress tracking, discussion forums, assignments, and immediate feedback (Rahmi et al., 2025). These features enable teachers to create interactive learning environments that encourage students to participate actively in reading activities and monitor their learning progress effectively (Al Dagamseh & Osman, 2024; Chan & Lo, 2024).

Gamification is grounded in motivational theories that emphasize the role of rewards, achievement, and feedback in promoting learner engagement (Dichev et al., 2015; Yeh et al., 2025). Common gamification elements include points, badges, leaderboards, challenges, and immediate feedback. Points provide learners with a sense of accomplishment and progress, while badges serve as symbolic recognition of achievement. Leaderboards encourage healthy competition and social comparison, which can increase participation and persistence. Immediate feedback helps learners identify mistakes and improve their performance in real time (Ajogbeje, 2023). In reading instruction, these elements can enhance students' intrinsic and extrinsic motivation, encourage active participation, and sustain engagement throughout the reading process (Kheang et al., 2024). Previous studies have demonstrated that gamification can positively influence reading motivation, learning engagement, and academic achievement by transforming routine learning activities into more interactive and rewarding experiences (Chan & Lo, 2024; Hamari et al., 2014).

Although gamification has been widely investigated in language learning, most previous studies have focused on standalone gamified applications such as Kahoot and Quizizz (Hiba & Khatoon, 2023). These platforms are primarily designed for short-term quiz-based activities and are often used to assess learning outcomes at a specific moment (Ameen, 2025). In contrast, Canvas LMS offers a more comprehensive learning environment that integrates gamification features within the entire instructional process, including content delivery, progress monitoring, assignment management, interactive quizzes, and immediate feedback (Zandvakili et al., 2024). Such integration enables continuous learner engagement and supports long-term learning development rather than isolated classroom activities. Recent studies have reported the effectiveness of LMS-based gamification in enhancing student engagement and academic performance; however, empirical evidence regarding its impact on reading comprehension remains limited, particularly in the context of descriptive and narrative texts among EFL learners (Widodo et al., 2025). Furthermore, few studies have examined how Canvas-based gamification can simultaneously address vocabulary difficulties and low reading motivation. This gap highlights the need for further investigation into the effectiveness of Canvas-based gamification for improving students' reading comprehension. Therefore, this study aims to investigate the implementation of Canvas-based gamification to improve students' reading comprehension of descriptive and narrative texts. The findings are expected to contribute to the growing literature on LMS-based gamification and technology-enhanced language learning while providing practical guidance for English teachers seeking innovative instructional strategies.

2. METHODS

This study employed Classroom Action Research (CAR) to improve students' reading comprehension through Canvas-based gamification. Classroom Action Research is widely used to address classroom-based problems and improve instructional practices through systematic intervention and reflection (Yusron et al., 2023). The research followed the Kemmis and McTaggart model, which consists of four stages: planning, acting, observing, and reflecting. The study was conducted through two cycles at a public senior high school in Batam. The participants were 37 tenth-grade students who experienced difficulties in reading comprehension, particularly in understanding vocabulary, identifying detailed information in descriptive texts, and comprehending narrative texts. These aspects are considered important indicators in reading comprehension assessment because they reflect students' ability to construct meaning from texts and interpret information accurately (Asnawi et al., 2025; Samboteng et al., 2023).

The participants were selected purposively based on preliminary classroom observations and discussions with the English teacher. The selected class demonstrated difficulties in reading comprehension, particularly in vocabulary understanding, identifying detailed information, and interpreting descriptive and narrative texts. Furthermore, the class showed relatively low participation and engagement during reading activities compared to other tenth-grade classes, making it an appropriate target for the intervention. Prior to conducting the study, permission was obtained from the school principal and the English teacher. Students were informed about the purpose of the study, and participation took place as part of regular classroom learning activities. The identities of all participants were kept confidential, and the collected data were used exclusively for academic research purposes.

Canvas-based gamification was implemented during reading activities by integrating game elements such as points, interactive quizzes, progress monitoring, and immediate feedback. The integration of gamification features has been reported to enhance students' motivation, engagement, and participation in language learning activities (Huseinović, 2023). Students earned points for completing reading tasks and participating in quizzes, while immediate feedback enabled them to identify and correct their mistakes during the learning process. Progress monitoring features also allowed students to track their learning achievements and encouraged them to actively engage in reading activities. The learning materials focused on descriptive and narrative texts, which are commonly taught in secondary school English instruction.

In Cycle I, students participated in reading activities using Canvas-based gamification through interactive quizzes, point accumulation, and immediate feedback. Students completed reading tasks individually after reading descriptive and narrative texts. Observation results indicated that although students showed greater interest than in conventional learning, several students remained passive, had difficulty understanding unfamiliar vocabulary, and did not consistently participate in classroom discussions. Based on the reflection results from Cycle I, several modifications were introduced in Cycle II. Additional vocabulary support was provided before reading activities, reading instructions were simplified, and students received more frequent feedback during task completion. The gamification elements were also strengthened by increasing opportunities to earn points through participation and quiz completion. Furthermore, collaborative discussion activities were incorporated to encourage peer interaction and engagement. These modifications were intended to address the challenges identified during Cycle I and further improve students' reading comprehension and participation (Ahmed Abdel-Al Ibrahim et al., 2023).

Data were collected through reading comprehension tests, observation checklists, and field notes. The reading comprehension test was administered at the end of each cycle to assess students' understanding of main ideas, supporting details, vocabulary in context, and textual meaning. Reading comprehension tests remain one of the most frequently used instruments for evaluating students' comprehension performance in EFL contexts (Boubekri & Rouijel, 2024). The reading comprehension test consisted of 30 multiple-choice items covering four aspects of reading comprehension: identifying main ideas, supporting details, vocabulary in context, and textual meaning. Prior to implementation, the instrument was reviewed by two English language education experts to establish content validity and ensure alignment with the learning objectives and reading comprehension indicators. Revisions were made based on the experts' suggestions before the instrument was administered in the study. Observation checklists and field notes were also used to document students' participation, engagement, and classroom interactions during the implementation process. The use of multiple instruments enabled data triangulation and enhanced the credibility of the findings (Vivek et al., 2023).

The collected data were analyzed using both quantitative and qualitative approaches. Quantitative data were obtained from students' reading comprehension test scores, while qualitative data were derived from observation checklists and field notes. Quantitative analysis included the calculation of mean scores, score distributions, category frequencies, and percentage improvements between cycles. The percentage improvement was calculated to determine the extent of students' progress from Cycle I to Cycle II. Qualitative data were analyzed through data reduction, categorization, and interpretation to identify

patterns related to students' engagement, participation, and learning motivation during the implementation of Canvas-based gamification.

To interpret students' scores, this study adopted a scoring classification adapted from (Marsevani, 2023). This classification categorizes students' reading comprehension performance into five levels: Very Poor, Poor, Average, Good, and Very Good. The use of this classification facilitates the interpretation of quantitative data and enables systematic comparison of students' achievement across different cycles. The students' score categories are presented in Table 1.

Table 1. Students' Score Category (Adapted from (Marsevani, 2023))

Score	Category
10-39	Very Poor
40-60	Poor
61-70	Average
71-80	Good
81-100	Very Good

3. RESULT AND DISCUSSION

Results

During Cycle 1, Canvas-based gamification was implemented in reading activities focusing on descriptive and narrative texts. The planning stage involved preparing lesson plans, reading materials, interactive quizzes, observation checklists, and reading comprehension tests. Students participated in reading tasks through Canvas using points, interactive quizzes, and immediate feedback. The implementation aimed to increase students' engagement and support their reading comprehension development.

Observation findings showed that students were interested in the learning activities and actively participated in quizzes. However, several students still experienced difficulties in understanding unfamiliar vocabulary and identifying detailed information in the texts. Some students were also hesitant to participate in classroom discussions and answer reading-related questions. These challenges influenced their reading comprehension performance at the end of Cycle 1.

Table 2. Students' Reading Comprehension Achievement in Cycle 1

Category	Frequency	Percentage (%)
Very Poor	5	13.51
Poor	10	27.03
Average	11	29.73
Good	8	21.62
Very Good	3	8.11
Total	37	100

Table 2 shows that students' reading comprehension achievement in Cycle 1 was still relatively moderate. The majority of students were categorized as Average (29.73%), followed by Poor (27.03%) and Good (21.62%). Only three students (8.11%) achieved the Very Good category, while five students (13.51%) were classified as Very Poor. The mean score obtained in Cycle 1 was 64.27.

The observation checklist and field notes indicated that many students still struggled with vocabulary and detailed information within the texts. Several students demonstrated low participation and limited confidence when responding to questions. A small number of students also had irregular attendance during the implementation process. These factors may explain why some students remained in the Poor and Very Poor categories.

The reflection stage identified several challenges that affected students' reading comprehension performance in Cycle 1. Students required additional support in understanding vocabulary and clearer guidance when completing reading activities through Canvas. Some learners also needed more opportunities to participate actively in classroom discussions. Therefore, several instructional modifications were introduced in the next cycle.

To address these challenges, vocabulary pre-teaching activities were conducted before reading tasks in Cycle 2. The teacher also simplified instructions and provided more frequent feedback during learning activities. Additional opportunities to earn points were offered through participation and quiz completion. Collaborative discussion activities were also incorporated to encourage interaction and engagement among students.

Cycle 2 was implemented based on the modifications identified during the reflection stage. Students participated in reading activities that integrated vocabulary support, interactive quizzes, and immediate feedback through Canvas. They also received clearer instructions and greater encouragement to participate in discussions. As a result, students appeared more confident and familiar with the learning platform.

Observation findings revealed a noticeable improvement in students' engagement and classroom participation. Most students completed reading tasks actively and showed greater enthusiasm during quizzes. Students were also more willing to answer questions and contribute to discussions. These improvements suggested that the revised instructional strategy had a positive impact on the learning process.

Table 3. Students' Reading Comprehension Achievement in Cycle 2

Category	Frequency	Percentage (%)
Very Poor	2	5.41
Poor	6	16.22
Average	2	5.41
Good	8	21.62
Very Good	19	51.35
Total	37	100

Table 3 demonstrates a considerable improvement in students' reading comprehension achievement in Cycle 2. The number of students categorized as Very Good increased significantly to 19 students (51.35%). Meanwhile, the number of students in the Poor category decreased from 10 to 6 students, and those in the Average category decreased from 11 to 2 students. The mean score increased to 74.11.

The observation checklist and field notes supported the quantitative findings obtained in Cycle 2. Students showed higher levels of engagement, participation, and confidence during reading activities. They demonstrated better understanding of vocabulary and textual information than in the previous cycle. Furthermore, students required less assistance in navigating and using the Canvas platform.

Table 4. Comparison of Students' Mean Scores Across Cycles

Cycle	Mean Score
Cycle 1	64.27
Cycle 2	74.11

Table 4 presents the comparison of students' mean scores across the two cycles. The mean score increased from 64.27 in Cycle 1 to 74.11 in Cycle 2. This increase represents an improvement of 9.84 points or 15.31%. These findings indicate that Canvas-based gamification contributed positively to students' reading comprehension achievement.

Table 5. Summary of Observation Checklist and Field Note Findings Across Cycles

Aspect	Cycle 1	Cycle 2
Participation in quizzes	Moderate	High
Engagement during reading activities	Moderate	High
Confidence in answering questions	Low	High
Vocabulary understanding	Moderate	High
Familiarity with Canvas LMS	Moderate	High

Table 5 summarizes the observation checklist and field note findings across both cycles. Improvements were observed in students' participation, engagement, confidence, vocabulary understanding, and familiarity with the Canvas LMS. Field notes revealed that students became increasingly motivated to complete reading tasks and participate in gamified activities. These findings support the quantitative results and demonstrate the effectiveness of Canvas-based gamification in improving reading comprehension.

Discussion

The findings of this study demonstrate that Canvas-based gamification contributed to improvements in students' reading comprehension achievement. This improvement was reflected in the increase in the mean score from 64.27 in Cycle 1 to 74.11 in Cycle 2, as well as the substantial increase in the proportion of students categorized as Very Good. From a reading comprehension perspective, these findings suggest that

students became more capable of identifying main ideas, understanding vocabulary in context, recognizing supporting details, and interpreting textual meaning. These skills are essential components of reading comprehension because readers construct meaning by integrating textual information with prior knowledge and linguistic understanding (Ramadhianti & Somba, 2023).

The improvement in students' achievement can also be explained through the implementation of gamification elements. According to gamification theory, points, feedback, and achievement-oriented activities encourage learners to engage more actively in learning tasks and sustain their participation over time (Kian et al., 2022). In this study, students earned points for completing reading activities and received immediate feedback after quizzes, allowing them to recognize and correct misunderstandings directly. These mechanisms may have strengthened students' engagement with reading materials and encouraged more consistent participation throughout the learning process (Anggrainy et al., 2024).

Importantly, the improvement observed in this study cannot be attributed solely to the use of Canvas as a learning management system. As an LMS, Canvas primarily provides a digital environment for content delivery, assignment management, and learning monitoring. However, the gamification elements integrated within Canvas, particularly points, interactive quizzes, and immediate feedback, played a more direct role in promoting active engagement with reading tasks. Therefore, it was the combination of LMS functionality and gamification strategies that supported the development of students' reading comprehension skills.

Although the overall results were positive, a small number of students remained in the Poor and Very Poor categories at the end of Cycle 2. Based on the observation checklist and field notes, these students continued to experience difficulties in vocabulary comprehension and identifying detailed information within descriptive and narrative texts, suggesting that their reading comprehension skills had not yet developed at the same pace as those of their peers. Furthermore, several of these students demonstrated lower levels of participation and motivation during learning activities and were absent from several instructional sessions, which may have limited their exposure to the learning materials, classroom discussions, and reading practice opportunities provided throughout the intervention. Previous studies have suggested that limited vocabulary knowledge, low learning engagement, and reduced instructional exposure may hinder the development of reading comprehension skills among EFL (Imbaquingo & Cárdenas, 2023). Nevertheless, the number of students in these categories was relatively small compared to those who achieved Good and Very Good performance, indicating that the intervention was generally effective in improving reading comprehension for the majority of participants.

The findings are consistent with previous studies reporting that gamification positively influences students' motivation and academic performance (Azzouz Boudadi & Gutiérrez-Colón, 2020; Chan & Lo, 2024). However, unlike many studies that focus on standalone applications such as Kahoot or Quizizz, this study demonstrates the effectiveness of integrating gamification within Canvas LMS throughout the learning process (Janković et al., 2024). The continuous use of quizzes, progress monitoring, and immediate feedback allowed students to engage with reading activities beyond isolated assessment tasks (Oudat & Othman, 2024). Consequently, this study contributes to the growing literature on technology-enhanced language learning by demonstrating that Canvas-based gamification can support both student engagement and reading comprehension development in EFL contexts.

4. CONCLUSION

This study demonstrated that the implementation of Canvas-based gamification effectively improved students' reading comprehension of descriptive and narrative texts. The findings revealed a significant improvement in students' achievement across the two cycles, as indicated by the increase in the mean score and the substantial growth in the number of students categorized as Very Good. The integration of gamification features within Canvas LMS encouraged greater student engagement, participation, and motivation during reading activities. Furthermore, students showed better understanding of vocabulary, detailed information, and textual meaning in both descriptive and narrative texts. These findings suggest that Canvas-based gamification can serve as an effective instructional strategy for enhancing reading comprehension in EFL classrooms. Therefore, English teachers are encouraged to integrate gamified learning activities through digital learning platforms to create more interactive and engaging reading experiences.

Despite these positive findings, this study was limited to a single class of 37 tenth-grade students at one public senior high school in Batam and focused only on descriptive and narrative texts. Consequently, the findings may not be generalizable to other educational contexts, student populations, or text genres. Future research is recommended to involve larger and more diverse samples, examine the long-term effects of Canvas-based gamification, and investigate its effectiveness in improving other language skills such as

writing, listening, and speaking. Further studies may also compare different gamification elements to identify which features contribute most significantly to students' reading comprehension development.

5. ACKNOWLEDGE

The author would like to express sincere gratitude to the principal, English teacher, and students of the participating school for their cooperation and support throughout the research process. The author also extends appreciation to all individuals who contributed to the completion of this study through their guidance, assistance, and encouragement.

6. REFERENCES

- Ahmed Abdel-Al Ibrahim, K., Cuba Carbajal, N., Zuta, M. E. C., & Bayat, S. (2023). Collaborative learning, scaffolding-based instruction, and self-assessment: impacts on intermediate EFL learners' reading comprehension, motivation, and anxiety. *Language Testing in Asia*, 13(1), 16. <https://doi.org/10.1186/s40468-023-00229-1>
- Ajogbeje, O. J. (2023). Enhancing Classroom Learning Outcomes: The Power of Immediate Feedback Strategy. *International Journal of Disabilities Sports and Health Sciences*, 6(3), 453-465. <https://doi.org/10.33438/ijdshs.1323080>
- Al Dagamseh, R., & Osman, S. Z. (2024). The Effect of Canvas LMS on Motivation, Engagement, and Interaction in Al Ain Private Schools. *International Journal of Academic Research in Progressive Education and Development*, 13(4). <https://doi.org/10.6007/IJARPED/v13-i4/23586>
- Ameen, F. (2025). Evidence Without Hype, Gamified Quizzing in EFL and ESL Classrooms in Low-Input Contexts, a Critical Review and Minimum Reporting Standards. *Education Sciences*, 15(12), 1568. <https://doi.org/10.3390/educsci15121568>
- Anaktototy, K., & Lesnussa, I. (2022). Improving EFL Students' Reading Comprehension and Critical Thinking Skill through Directed Reading Thinking Activity. *Eralingua: Jurnal Pendidikan Bahasa Asing Dan Sastra*, 6(1), 244. <https://doi.org/10.26858/eralingua.v6i1.27711>
- Anggrainy, F. P. N., Sharizan, S., Sriyanda, R., & Farhan, M. (2024). Gamifying Reading Motivation in EFL Students: Enhancing Engagement and Language Learning Through ICT. *Jurnal Simki Pedagogia*, 7(1), 106-118. <https://doi.org/10.29407/jsp.v7i1.547>
- Asnawi, A., Sinaga, Y. K., Herman, H., Sianturi, B. K., Kartolo, R., & Tannuary, A. (2025). Investigating Teaching-Learning Strategies in Improving EFL Learners' Reading Comprehension: A Lesson Learned from Junior High Schools. *Journal of Languages and Language Teaching*, 13(1), 189. <https://doi.org/10.33394/jollt.v13i1.13362>
- Azwar, T. A., Ristiyanti, S. H., & Puspita, H. (2024). Enhancing Indonesian EFL Students' Reading Comprehension of Report Texts through KWL Strategy with Multimedia: A Classroom Action Research. *Jambura Journal of English Teaching and Literature*, 5(2), 54-70. <https://doi.org/10.37905/jetl.v5i2.26015>
- Azzouz Boudadi, N., & Gutiérrez-Colón, M. (2020). Effect of Gamification on students' motivation and learning achievement in Second Language Acquisition within higher education: a literature review 2011-2019. *The EuroCALL Review*, 28(1), 40. <https://doi.org/10.4995/eurocall.2020.12974>
- Baker, M. J., Pallarès, G., Cedar, T., Brandel, N., Bietti, L., Schwarz, B., & Détienne, F. (2023). Understanding the moral of the story: Collaborative interpretation of visual narratives. *Learning, Culture and Social Interaction*, 39, 100700. <https://doi.org/10.1016/j.lcsi.2023.100700>
- Boubekri, A., & Rouijel, E. H. (2024). The Effect of Performance Assessment Approach on the Development of Reading Comprehension Skills in English for Specific Purposes Context. *European Journal of English Language Teaching*, 9(3). <https://doi.org/10.46827/ejel.v9i3.5527>
- Chan, S., & Lo, N. (2024). Enhancing EFL/ESL instruction through gamification: a comprehensive review of empirical evidence. *Frontiers in Education*, 9. <https://doi.org/10.3389/feduc.2024.1395155>
- Dichev, C., Dicheva, D., Angelova, G., & Agre, G. (2015). From Gamification to Gameful Design and Gameful Experience in Learning. *Cybernetics and Information Technologies*, 14(4), 80-100. <https://doi.org/10.1515/cait-2014-0007>
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does Gamification Work? -- A Literature Review of Empirical Studies on Gamification. *2014 47th Hawaii International Conference on System Sciences*, 3025-3034. <https://doi.org/10.1109/HICSS.2014.377>
- Hiba, Q., & Khatoon, S. (2023). The Impact of Gamification Tools on Reading Comprehension Skills: A Comparative Study of Kahoot! Quizz and Baamboozle of English Language Learners. *PAKISTAN LANGUAGES AND HUMANITIES REVIEW*, 7(IV). [https://doi.org/10.47205/plhr.2023\(7-IV\)16](https://doi.org/10.47205/plhr.2023(7-IV)16)

- Huseinović, L. (2023). The Effects of Gamification On Student Motivation And Achievement In Learning English As A Foreign Language In Higher Education. *MAP Education and Humanities*, 4(1), 10–36. <https://doi.org/10.53880/2744-2373.2023.4.10>
- Imbaquingo, A., & Cárdenas, J. (2023). Project-Based Learning as a Methodology to Improve Reading and Comprehension Skills in the English Language. *Education Sciences*, 13(6), 587. <https://doi.org/10.3390/educsci13060587>
- Janković, A., Maričić, M., & Cvjetičanin, S. (2024). Comparing science success of primary school students in the gamified learning environment via Kahoot and Quizizz. *Journal of Computers in Education*, 11(2), 471–494. <https://doi.org/10.1007/s40692-023-00266-y>
- Kheang, T., Chin, P., & Em, S. (2024). Reading Motivation to Promote Students' Reading Comprehension: A Review. *International Journal of Languages and Culture*, 4(1), 1–8. <https://doi.org/10.51483/IJLC.4.1.2024.1-8>
- Kian, T. W., Sunar, M. S., & Su, G. E. (2022). The Analysis of Intrinsic Game Elements for Undergraduates Gamified Platform Based on Learner Type. *IEEE Access*, 10, 120659–120679. <https://doi.org/10.1109/ACCESS.2022.3218625>
- Le, H. Van, & Nguyen, L. Q. (2024). Promoting L2 learners' critical thinking skills: the role of social constructivism in reading class. *Frontiers in Education*, 9. <https://doi.org/10.3389/educ.2024.1241973>
- Machfudi, Moch. I., & Afidah, A. (2022). Students' Difficulties in Vocabulary Mastery. *CREW Journal*, 1(1), 01–12. <https://doi.org/10.35719/crewjournal.v1i1.1359>
- Marsevani, M. (2023). Boosting Students' Grammatical Competence through Group Work Activities during Covid-19 Pandemic. *Journal of Education Action Research*, 7(1), 106–113. <https://doi.org/10.23887/jear.v7i1.52184>
- Nussy, W. S., & Pekpekay, N. (2024). Reading Comprehension Skills in EFL Students. *MATAI: International Journal of Language Education*, 5(1), 34–42. <https://doi.org/10.30598/matai.v5i1.16238>
- Oudat, Q., & Othman, M. (2024). Embracing digital learning: Benefits and challenges of using Canvas in education. *Journal of Nursing Education and Practice*, 14(10), 39. <https://doi.org/10.5430/jnep.v14n10p39>
- Rahmi, I., Rimenda, T., & Ariyanti, T. D. (2025). Gamification as an alternative to increase students' motivation: a scoping review. *Journal of Education and Learning (EduLearn)*, 19(2), 1125–1133. <https://doi.org/10.11591/edulearn.v19i2.21771>
- Ramadhianti, A., & Somba, S. (2023). Reading Comprehension Difficulties in Indonesian EFL Students. *Journal of English Language Teaching and Literature (JELTL)*, 6(1), 1–11. <https://doi.org/10.47080/jeltl.v6i1.2477>
- Samboteng, L., Nadeak, B., Razati, G., Abidin, A. Z., & Rachman, R. S. (2023). The Effectiveness of Pre-test and Post-test Using Kahoot in Increasing Students' Attention. *AL-ISHLAH: Jurnal Pendidikan*, 15(1), 203–210. <https://doi.org/10.35445/alishlah.v15i1.2833>
- Vivek, R., Nanthagopan, Y., & Piriyaatharshan, S. (2023). Beyond Methods: Theoretical Underpinnings of Triangulation in Qualitative and Multi-Method Studies". *SEEU Review*, 18(2), 105–122. <https://doi.org/10.2478/seeur-2023-0088>
- Vrhovec, A. R., & Soršak, L. G. (2024). Students' Vocabulary and Reading Comprehension. *European Journal of Educational Research*, volume-13-2024(volume-13-issue-4-october-2024), 1665–1678. <https://doi.org/10.12973/eu-jer.13.4.1665>
- Widodo, J. P., Musyarofah, L., & Slamet, J. (2025). The Impact of Digital-Interactive-Book Gamification-Based Instruction on Academic Learning Outcomes of Students who Learn at Their Own Pace: Insight from Indonesia 1. In *MEXTESOL Journal* (Vol. 49, Number 2).
- Yeh, H., Chang, T.-S., & Li, Y.-H. (2025). The role of gamification in enhancing consumer engagement at expositions through self-determination theory. *Journal of Services Marketing*, 39(5), 551–568. <https://doi.org/10.1108/JSM-08-2024-0423>
- Yusron, A., Irawati, J., Teguh Setiawan Wibowo, Husen, & Sudadi. (2023). The Impact of Classroom Action Research (CAR) and Innovation on Teacher Professionalism: an Intervention of Competence. *Jurnal Informatika Ekonomi Bisnis*, 563–570. <https://doi.org/10.37034/infv.v5i2.594>
- Zandvakili, R., Liu, D., Li, A. T., Santhanam, R., & Schanke, S. (2024). *Design and Evaluation of a Gamified Generative AI Chatbot for Canvas LMS Courses* (pp. 259–264). https://doi.org/10.1007/978-3-031-61953-3_29