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Research Article

Enhancing Reading Comprehension Skills of Eleventh Grade Students in SMAN 3 Malang through a Gamified Platform

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Abstract
This Classroom Action Research explores how the incorporation of a gamified learning platform influenced students' ability to understand written Eleventh Grade Students in SMAN 3 Malang. Framed by principles of intrinsic motivation and ongoing assessment, the initial cycle combined traditional evaluative tasks, structured observations of classroom interactions, and a survey capturing learners' attitudes toward the intervention. Findings revealed a notable improvement in overall reading performance, with learners demonstrating greater accuracy on platform-based quizzes. Classroom dynamics shifted positively: students were more consistently engaged in learning activities and maintained a quieter, more focused environment. Survey responses indicated that participants experienced a stronger sense of choice in their learning, felt more capable when tackling tasks, and enjoyed closer connections with peers and their instructor. Subsequent cycles will seek to enhance collaborative structures and tailor quiz challenges to better suit diverse proficiency levels.

Keywords
Reading comprehension; gamification; blooket; classroom action research

Introduction
Reading comprehension is essential for academic success, yet many high school students in Indonesian struggle to develop this critical skill. One major contributing factor is the continued reliance on teacher-centered pedagogies, which often prioritize content delivery over interactive and differentiated instruction. These traditional approaches fail to engage students actively, making it difficult for them to internalize strategies necessary for deep comprehension (Chen & Nguyen, 2021; Sari & Hidayat, 2020). In recent years, gamification has emerged as a promising alternative to foster student engagement and motivation. By integrating game mechanics such as point systems, competition, and immediate feedback

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into learning activities, gamified platforms create a more dynamic classroom environment. Self-Determination Theory (Deci & Ryan, 2000) provides a useful lens to understand this process, positing that students are more motivated when their needs for autonomy, competence, and relatedness are met. Gamified learning environments are particularly effective in supporting these needs, which can in turn enhance intrinsic motivation and academic performance (Hamari et al., 2016).

Furthermore, by combining Self Determination Theory with formative assessment principles (Black & Wiliam, 1998), educators can better understand how gamification serves as a strategic tool to motivate students and promote meaningful learning. Game elements such as points, leaderboards, and immediate feedback are not merely for entertainment, they function as encouraging affordances that fulfill learners' psychological needs for autonomy, competence, and relatedness (Keller, 1987; Deci & Ryan, 2000). When integrated thoughtfully, these features help create a dynamic learning environment that fosters engagement and persistence. In this context, Blooket offers a dual advantage: its engaging game formats capture student interest, while its robust analytics system allows educators to identify learning gaps and adjust instruction accordingly. Through item-level diagnostics, Blooket enables data-driven reflection that supports the iterative nature of classroom action research, making it a practical and powerful tool for language teachers.

The previous studies conducted using the gamified platforms, such as Blooket, in enhancing student learning outcomes, particularly in language classrooms showed various results. For instance, a study by Patel and Wong (2023) demonstrated that students using Blooket to review reading comprehension texts showed improved engagement and accuracy, attributing the gains to the platform's game-based repetition and real-time feedback. Similarly, Gonzalez and Smith (2022) found that integrating Blooket into English reading lessons not only improved test performance but also contributed to more sustained classroom focus and peer discussion. These findings suggest that gamified activities, especially those that incorporate formative assessment elements, can function as effective supplementary tools for language instruction.

In addition, other gamified tools have shown comparable effects when used in similar educational settings. Sari and Hidayat (2020) conducted a case study in Indonesia using Quizizz and found a statistically significant improvement in students' reading scores, alongside higher learner satisfaction. Meanwhile, Rogers and Patel (2024) highlighted the utility of real-time analytics provided by platforms like Blooket for identifying learner misconceptions and adapting instruction accordingly. These studies collectively point to the potential of game-based platforms in supporting comprehension development, encouraging self-regulation, and fostering collaborative learning environments. As such, the integration of Blooket into classroom activities aligns with broader trends in educational technology and offers practical value in improving language proficiency.

Moreover, Kusuma and Pratama (2022) implemented Blooket in a senior high school in Surabaya and reported significant gains in students' ability to identify main ideas and infer meaning from context. Their study emphasized how the competitive element of Blooket motivated students to process texts more attentively. Similarly, Raharjo and Fitria (2023) integrated Blooket into a narrative reading unit and found that the immediate feedback feature allowed students to self-correct and internalize comprehension strategies more effectively. These studies support the notion that gamified reading activities, when structured to focus on comprehension elements like inference, main idea recognition, and detail identification, can significantly benefit learners in EFL settings.

Besides that, Setiawan et al. (2021) demonstrated that gamified digital quizzes also helped students develop strategic reading habits by encouraging prediction, question-posing, and summary-making during text engagement. In another study, Oktaviani and Herlina (2024) compared Quizizz and Blooket and concluded that while both tools positively influenced comprehension, Blooket offered a more interactive and collaborative experience due to its varied game modes and peer competition features.

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These findings align with the principles of strategic reading instruction, which emphasize activating prior knowledge, monitoring understanding, and drawing inferences (Afflerbach et al., 2008). Digital platforms like Blooket effectively scaffold these strategies, particularly when designed with specific comprehension targets in mind (Lee & Huang, 2018).

Reading comprehension strategies are essential cognitive approaches that help learners understand, interpret, and analyze texts more effectively. These strategies typically include identifying main ideas, making inferences, summarizing, predicting, and using context clues skills which are especially important in second language acquisition. Recent research from 2020 to 2025 emphasizes the need for explicit instruction in these strategies to support students' reading development. For instance, Suryani and Hafidz (2021) found that students taught using a structured reading strategy framework significantly outperformed their peers in comprehension assessments. Similarly, Nugroho and Widya (2023) demonstrated that explicit metacognitive instruction in strategies such as summarization and questioning improved not only students' test scores but also their confidence in reading English texts.

The integration of digital tools has further enhanced the teaching and practice of reading comprehension strategies. According to Lestari and Wahyuni (2024), platforms such as Blooket and Quizizz can be tailored to target specific strategies by designing questions that prompt inference, context analysis, and idea sequencing. Their study highlighted that gamified activity not only reinforced strategic reading but also made the practice enjoyable and sustainable for students. Another study by Arifin and Kartika (2022) supported these findings, showing that students who regularly engaged with digital comprehension strategy games performed better in post-tests and demonstrated higher retention rates. These studies indicate that reading strategies, when supported by both explicit instruction and interactive digital reinforcement, can substantially improve learners' reading comprehension in EFL classrooms.

Large class sizes, insufficient infrastructure, and varied levels of digital literacy continue to hinder the effective integration of educational technology in Indonesian classrooms (Sari & Hidayat, 2020; Fauzi & Yuliana, 2021). These constraints are particularly problematic when implementing digital tools that require stable internet access, personal devices, and consistent student engagement. In many schools, internet connectivity is either unstable or limited, and some students lack access to smartphones or laptops, creating a digital divide that exacerbates learning inequalities (Putri & Cahyono, 2022).
Despite these challenges, several studies have shown that structured implementation strategies can help educators navigate technological limitations and optimize gamified learning. For example, Anggraeni and Santoso (2023) emphasized the importance of clear behavioral expectations and digital literacy support in enhancing the success of Blooket-based activities. Similarly, Prasetyo and Nurhayati (2024) noted that routines, such as pre-task briefings and post-task reflections, significantly increased student focus and minimized off-task behavior during gamified sessions. These findings underline the necessity of intentional classroom management and scaffolded digital instruction when adopting game-based learning tools in resource-limited educational contexts.

The current study adopts a gamified approach through the use of Blooket, a digital tool that transforms formative assessments into interactive challenges. Unlike traditional quizzes, Blooket incorporates engaging game modes that can be customized to suit lesson objectives and learner levels. This study investigates whether such an approach can improve not only reading comprehension outcomes but also influence students' attitudes toward learning English texts, specifically analytical exposition texts, which require higher-order thinking skills. By integrating gamified strategies, the study aims to bridge the gap between curriculum demands and student readiness.
This study asks:
1. How does Blooket integration affect comprehension scores for reading comprehension activity?
2. How do students perceive engagement, motivation, and collaboration during gamified activities?

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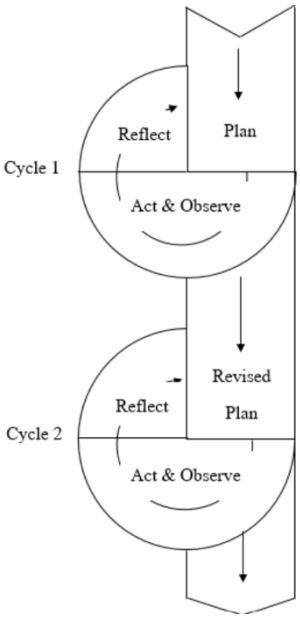
Method

This study employed a Classroom Action Research (CAR) design grounded in the framework by Kemmis and McTaggart (1988), which involves a cyclical process comprising planning, action, observation, and reflection. In the planning phase, the researcher assessed the challenges faced by eleventh-grade students in understanding analytical exposition texts and conducted a needs analysis through teacher consultation and preliminary observation. Based on the findings and a literature review on gamified instruction, the researcher designed a series of activities using Blooket that aligned with curriculum goals. These activities focused on key reading comprehension elements, such as identifying main ideas, supporting arguments, and making logical inferences, and were developed into interactive quizzes with varying difficulty levels.

Figure 1 : CAR Cycle



During the action phase, these Blooket-based activity were administered and students participated using their personal devices, responding to questions in real-time while receiving instant feedback. In the observation phase, the researcher and a co-observer used structured checklists and field notes to monitor student engagement, peer interaction, behavioral patterns, and general classroom atmosphere. In the final reflection phase, all data, including quantitative (pre- and post-test results and Blooket accuracy rates) and qualitative (student feedback and observational notes), were triangulated to evaluate the intervention's impact. These insights guided the formulation of adjustments for the next CAR cycle, emphasizing more structured group roles, refined quiz content, and supportive classroom management practices to optimize future implementations.

The participants in this study were twenty-eight eleventh-grade students aged 16 to 17 years from SMAN 3 Malang, a public senior high school located in East Java, Indonesia. The class was selected through purposive sampling based on the English teacher’s recommendation and the students' prior performance in reading comprehension. The group represented a diverse range of reading abilities, which provided a realistic sample for observing the impact of gamified instruction in a typical classroom setting. Before the study, the students had limited exposure to gamified learning platforms, which allowed for an authentic assessment of Blooket's novelty and potential influence.

To ensure ethical compliance, informed consent was obtained from the participants and their parents or guardians. The researcher explained the objectives, procedures, potential benefits, and confidentiality measures associated with the study. Participation was voluntary, and students were informed of their right to withdraw without academic penalty. Pseudonyms were used in all reports to protect the identity

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of the students, and data collected during the study was stored securely and used solely for academic research purposes.

The main instrument used to measure students' reading comprehension was a multiple-choice reading test consisting of 10 items, administered both as a pre-test and a post-test. These questions were designed to assess students' understanding of analytical exposition texts by focusing on core comprehension elements such as identifying main ideas, supporting details, inferences, and authorial intent. The test was constructed by the researcher and validated by two English language experts to ensure relevance and clarity. Each correct response was awarded one point, with the highest possible score being 10. The results from this instrument served as the primary quantitative data for assessing improvement in students' reading comprehension throughout the intervention.

In addition to the reading test, two other tools were utilized to gather supporting data: an observation checklist and a student perception survey. The observation checklist was completed by students as a form of self-assessment at the end of each Blooket session. It covered items related to attention, participation, and group collaboration, using a 5-point scale. This approach encouraged students to reflect on their learning behaviour during the activity. The perception survey, conducted in the final week, included both Likert-scale and open-ended items aimed at evaluating student motivation, enjoyment, and perceived learning. Together, these instruments provided a comprehensive understanding of the students' cognitive and affective responses to the gamified learning experience.

The implementation of this study was carried out over four weeks, divided into sequential stages aligned with the CAR cycle. In the first week, a pre-test was administered to assess students' baseline reading comprehension using a 10-item multiple-choice test, alongside a perception survey aimed at understanding students' initial attitudes toward reading and gamified learning. The survey combined Likert-scale and open-ended items to gather insights into students' motivation and preferences. This initial diagnostic stage provided critical data that informed the design of the subsequent intervention. In the second week, students participated in Blooket activities specifically designed around analytical exposition texts. Each session introduced different aspects of reading comprehension such as main idea recognition, identifying supporting details, and making inferences. These sessions were conducted in a gamified format to encourage participation and engagement.

In the third week, students took a daily reading test to monitor short-term comprehension gains and reinforce the concepts taught in the previous sessions. These daily assessments also served as formative evaluations to inform classroom strategies. Finally, in the fourth week, a post-test was conducted using the same 10-item format as the pre-test to evaluate overall improvement in reading comprehension. At the same time, students completed a final perception survey to reflect on their learning experience and the impact of the gamified activities. The data gathered from pre-tests, post-tests, daily assessments, perception surveys, and observation checklists were analyzed using descriptive statistics to identify score improvements and thematic analysis to interpret qualitative feedback. This mixed-method approach provided a holistic understanding of the intervention's effectiveness in enhancing reading comprehension and learner motivation.

Results

Quantitative Outcomes

The study involved 28 ten-grade students (n = 28) who completed pre- and post-tests. On the pre-test, scores ranged from 0 to 70, with a mean of 57.24 (SD = 12.30), a median of 60, and a standard deviation indicating moderate variability. In the post-test, scores improved substantially, ranging from 60 to 100. The mean score rose to 85.86 (SD = 12.39), with a median of 80, a minimum of 60, and a maximum of 100. These descriptive statistics demonstrate the overall improvement in comprehension and the remaining individual differences among students.

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Table 1. Table 1. Pre-test and Post-test Result

Statistics	Pre-test (n=28)	Post-test (n=28)
Mean	57.24	85.86
Median	60	80
Standard Deviation	12.30	12.39
Minimum	0	60
Maximum	70	100

The Blooket quiz accuracy, which aggregated responses in one session, remained at 74%, indicating a certain level of student mastery of the reading material presented through gamified learning activities. Each Blooket session consisted of 15 items that focused on the core components of analytical exposition texts, including identifying main ideas, supporting details, and inferential reasoning. The high percentage of correct responses during the gamified quizzes suggests that students not only engaged with the material but also retained and applied comprehension strategies during real-time assessments. These findings align with the post-test results, where students demonstrated a significant improvement in comprehension scores, further reinforcing the effectiveness of the Blooket-based approach in supporting learning outcomes.

Observational Findings

Classroom observations conducted during the intervention revealed a substantial increase in student engagement, with average engagement scores rising from 2.8 before the intervention to 4.1 during the Blooket sessions on a 5-point scale. These scores were derived from a structured observation checklist that monitored on-task behaviors, participation in discussions, responsiveness to quiz prompts, and visible enthusiasm. Observers noted that most students actively participated, often displaying excitement and competitive spirit during the gamified sessions. This improvement in classroom engagement reflects the stimulating learning environment created through the integration of Blooket, which effectively leveraged game-based mechanics to capture student interest and foster motivation.

In addition to improved engagement, the intervention also contributed to a decrease in classroom noise and off-task behavior. Prior to the intervention, the classroom exhibited an average noise level of approximately 75%, as measured through periodic assessments at 10-minute intervals. During the Blooket session, this figure dropped to around 60%, suggesting that the interactive nature of the activity helped maintain students' focus. Although complete silence was not expected in such interactive settings, the reduction in disruptive noise indicated improved classroom management and higher levels of task orientation. However, the observational data also revealed that some students occasionally became overly excited, which suggests the need for clearer behavioral expectations and routines in future implementations.

Peer collaboration also improved over the course of the intervention. Before the Blooket-based activities, collaboration among students was minimal and often passive. However, during the intervention, students were observed helping one another answer questions, explaining their reasoning, and encouraging their peers, especially during group modes of Blooket play. This cooperative learning dynamic reflects one of the core tenets of Self-Determination Theory, relatedness, as students appeared more socially connected and supportive. These observational insights, when considered alongside the quantitative results, provide further evidence that gamification can promote not only cognitive engagement but also social interaction and a more cohesive learning environment.

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Discussion

In addition to the quantitative and observational evidence, student responses in the perception survey highlighted the positive emotional and cognitive impact of the gamified intervention. Many students expressed a sense of increased motivation and confidence when engaging with the reading tasks presented through Blooket. The gamified environment reduced anxiety typically associated with conventional reading assessments, and several students reported feeling more comfortable making mistakes and learning from them in a competitive yet supportive setting. This supports existing research that suggests gamified learning contexts enhance student resilience and willingness to persist in cognitively demanding tasks (Hamari et al., 2016; Patel & Wong, 2023). Moreover, open-ended survey responses indicated that students appreciated the immediate feedback and the variety of game formats, which sustained their attention and promoted deeper engagement with the text materials.

Besides that, the substantial gain of 28.62 points from pre-test to post-test indicates that the integration of Blooket-based activities had a pronounced impact on students' reading comprehension. Compared to the 11.51-point increase observed in earlier CAR implementations, this result suggests that the extended timeline and iterative refinement of quiz content significantly enhanced learning outcomes. Despite the improvement, the consistency of the SD values (12.30 pre-test vs. 12.39 post-test) and the score range of 60–100 reveal persistent individual differences, underscoring the need for differentiated support to ensure all learners benefit equally.

Another noteworthy aspect of the intervention is the way it fostered collaborative learning. The observation data revealed that peer interactions increased in quality and frequency during Blooket sessions, as students were frequently seen discussing question items, providing mutual support, and collectively celebrating group success. These social learning behaviors not only reflect the relatedness dimension of Self-Determination Theory but also indicate the potential for gamified learning to build a more inclusive and cooperative classroom culture. This balance of collaboration and friendly competition can be especially powerful in supporting language learners who benefit from social interaction and shared meaning-making.

Lastly, the reflective field notes captured by the teacher and co-observer added further nuance to the findings. They reported that students appeared more self-regulated and intrinsically motivated as the intervention progressed. Rather than relying solely on teacher prompts, students began to demonstrate proactive behavior, such as volunteering to lead teams, asking clarifying questions, and revisiting previously incorrect answers. These behaviors suggest that students were not only engaging with the content but also developing important metacognitive skills associated with successful reading comprehension. Such evidence highlights the transformative potential of gamified instructional models not merely as tools for assessment or engagement, but as frameworks that can nurture autonomous, motivated, and strategically aware readers.

Conclusion

This CAR study demonstrates that the systematic integration of Blooket into reading instruction can yield substantial improvements in comprehension, as evidenced by an average gain of 28.62 points and a post-test mean of 85.86. The findings highlight the dual impact of gamified formative assessment on performance and motivation, confirming that platforms like Blooket can support meaningful learning in EFL contexts.

To enhance future implementation, several practical and pedagogical refinements are suggested based on the findings of this research. First, differentiated instructional strategies are necessary to address the varied comprehension levels among learners. Despite the notable overall improvement in comprehension scores, the range and distribution of post-test outcomes indicated the presence of learners

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who may still require additional scaffolding. Grouping students based on their reading proficiency and assigning them tiered tasks can help accommodate individual learning needs while promoting collaborative learning. Providing extended opportunities for peer discussion and structured support mechanisms, such as scaffolding questions or guided reading activities can also boost the performance of lower-achieving students. Additionally, implementing quiz designs that include various difficulty levels can ensure that each learner remains appropriately challenged, thereby sustaining motivation and engagement.

Equally important is the incorporation of behavioral and procedural structures to optimize the learning environment during gamified sessions. Although gamification has been shown to increase motivation and engagement, the study observed intermittent off-task behaviors and fluctuating noise levels. To address this, future cycles should include clear behavioral expectations, structured group roles, and explicit routines before and following Blooket sessions. This can be reinforced through classroom management strategies such as time limits, reward systems, and reflective debriefings. Furthermore, technical challenges must also be considered, particularly in contexts where internet stability is inconsistent. Educators are encouraged to develop offline adaptations of quiz content and provide printable materials as a backup. Finally, conducting longer-term cycles with built-in reflection points and post-intervention assessments will allow for evaluation of knowledge retention and deeper comprehension development over time. These combined efforts can significantly enhance the implementation and scalability of gamified approaches in reading comprehension instruction.
By implementing these strategies, educators can maximize the benefits of gamification while addressing the complexities of classroom dynamics and learner diversity.

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References

Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and reading strategies. The Reading Teacher, 61(5), 364–373.

Alam, M., & Rahman, S. (2021). Gamification in education: A review. Journal of Educational Technology, 39(2), 203–221.

Black, P., & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. Phi Delta Kappan, 80(2), 139–148.

Bofferding, L., Sohn, E., Storm, A., & Klein, E. (2017). Effects of game-based vocabulary instruction on incidental word learning. Language Learning & Technology, 21(1), 104–120.

Chen, X., & Nguyen, T. (2021). Implementing game-based learning in reading comprehension. Journal of Educational Psychology, 113(4), 652–668.

Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Psychological Inquiry, 11(4), 227–268.

Hamari, J., Shernoff, D., Rowe, E., Coller, B., Asbell-Clarke, J., & Edwards, T. (2016). Challenging games help students learn: An empirical study on engagement, flow, and immersion in game-based learning. Computers in Human Behavior, 54, 170–179.

Keller, J. M. (1987). Development and use of the ARCS model of motivational design. Journal of Instructional Development, 10(3), 2–10.

Kemmis, S., & McTaggart, R. (1988). The action research planner. Deakin University Press.

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Lee, C. (2020). Digital transformation in the classroom: A study on gamification. Journal of Learning Innovations, 15(3), 98–114.
Lee, S. Y., & Huang, H. (2018). Effects of strategy-based reading interventions on EFL learners' comprehension. TESOL Quarterly, 52(2), 362–378.
Rogers, L., & Patel, M. (2024). The role of digital assessments in enhancing literacy skills. Journal of Interactive Learning, 18(2), 130–145.
Sari, D., & Hidayat, T. (2020). Gamified learning in Indonesian classrooms: A case study. Indonesian Journal of Educational Research, 7(1), 59–75.
Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.

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