

Gamifying Vocabulary Learning: Boosting Students' Interest through Quizizz in Indonesian High School Level

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ABSTRACT

This study investigates the effectiveness of Quizizz games in increasing eleventh-grade students' interest in learning English vocabulary at a State High School in Bulukumba. The research involved 31 purposively selected students using a one-shot quantitative design. Data were collected with a structured questionnaire measuring students' interest before and after the implementation of Quizizz-based activities. Reliability and validity tests confirmed the instruments' strong internal consistency, with Cronbach's Alpha coefficients exceeding the threshold for acceptable internal consistency (0.355). A t-test showed a significant increase in student interest, with a t-statistic of 9.049 exceeding the t-table value of 1.699 at the 5% significance level ($p = 0.000$). These results indicate that Quizizz, as a game-based digital learning platform, positively impacts student motivation and engagement. Students reported greater enjoyment, participation, and focus during vocabulary learning through interactive methods. Features such as instant feedback, competition, and appealing visuals helped sustain attention and make learning more dynamic and meaningful. The findings support previous research highlighting the ability of gamified platforms to transform traditional classrooms into motivating environments. In conclusion, gamified learning benefits beyond cognitive and affective domains to encompass classroom dynamics and social participation.

KEYWORDS

Gamification, Vocabulary learning, Quizizz, Interest, Indonesian high school

INTRODUCTION

In the past few years, integrating technology into education has significantly changed how students learn and how teachers teach. Gamification, or the use of game-like elements in non-game contexts to boost motivation and engagement, is one of the most critical developments in digital teaching. Gamification has increasingly been recognised as an effective way to foster active engagement, enjoyment, and enduring interest in language acquisition. Vocabulary, as an essential element of linguistic skill, helps enhance students'

communicative competence. Nonetheless, language acquisition is sometimes regarded as monotonous and dull, potentially resulting in diminished motivation and restricted retention (Kazu & Kuvvetli, 2023; Kruk & Kałużna, 2025; Y. Li et al., 2024; Simonnet et al., 2025; Solmaz, 2025). Because of this, teachers are looking for new ways to make learning vocabulary more fun and participatory, such as using game-based learning platforms.

Quizizz is one of the many digital tools out there that has received much attention as an effective way to learn. It combines game elements such as points, competition, and rapid feedback with academic content (Janković et al., 2024). Quizizz lets teachers make interactive quizzes that students can play alone or with others. This is a fun way to teach vocabulary that differs from the usual approach. Earlier research has shown that digital games can boost motivation, foster a positive learning environment, and give players a sense of accomplishment. For instance, Quizizz has been shown to boost students' focus, participation, and excitement, especially in language classes where student involvement is quite important.

Although research on gamification in education is increasing, there has been little study on using Quizizz to help senior high school students acquire vocabulary, particularly in the Indonesian EFL (English as a Foreign Language) environment. Indonesian students frequently have difficulty with vocabulary retention and application, attributable to insufficient exposure to authentic English input and the prevalence of teacher-centred pedagogical approaches. Gamified learning tools like Quizizz may make learning vocabulary more fun, interactive, and focused on the student (Liu et al., 2025; Panmei & Waluyo, 2022; Zhang & Crawford, 2024). Quizizz may help keep students' attention and boost their intrinsic motivation to learn new words by adding competition, rewards, and quick feedback.

Moreover, interest is a crucial factor in the efficacy of language acquisition. Students exhibiting elevated interest in a subject are more inclined to engage profoundly and attain superior learning outcomes (Ding & Yu, 2024; Mahmood et al., 2025; Portuguez-Castro & Santos Garduño, 2024). To improve language instruction, it is important to understand how gamified tools like Quizizz might make students more interested in learning new words. This research is especially pertinent in the post-pandemic educational context, when digital learning technologies have become essential to classroom instruction and student engagement.

Given this context, the current study seeks to investigate the impact of Quizizz games on

senior high school students' enthusiasm for acquiring English vocabulary. The study aims to determine whether incorporating Quizizz into classroom practices can significantly enhance students' passion and participation in vocabulary acquisition. This research contributes to the growing body of literature on gamified learning by providing empirical evidence and practical ideas for teachers on how to use technology to teach English.

METHOD

The study employed a one-shot case study approach to explore the impact of Quizizz games on student interest in learning English vocabulary. The population consisted of 338 eleventh-grade students at State Senior High School in Bulukumba, of whom 31 students from Class XI-1 were purposively selected as participants. Data were collected using a structured questionnaire developed to assess students' interest before and after the implementation of Quizizz-based learning activities. The questionnaire's validity and reliability were tested using statistical methods; the correlation coefficient (r -table) was 0.355 for 31 respondents, and Cronbach's Alpha values for both the independent variable (Quizizz-based learning) and the dependent variable (students' interest) exceeded this threshold, confirming internal consistency. The learning intervention involved incorporating Quizizz games into vocabulary lessons, leveraging interactive, game-based features such as instant feedback, leaderboards, and engaging visuals to enhance motivation. Data analysis used inferential statistics, specifically the t -test, to evaluate the significance of changes in student interest following the intervention. The study adhered to ethical principles, including obtaining informed consent from participants and maintaining the confidentiality of responses. This methodology enabled a focused examination of Quizizz's direct effect on student engagement in a natural classroom setting.

RESULTS

The result explores 17 key issues related to students' experiences and perceptions of Quizizz as a vocabulary-learning medium. In Figure 1, each issue captures an important facet of student engagement, motivation, comprehension, and classroom dynamics.

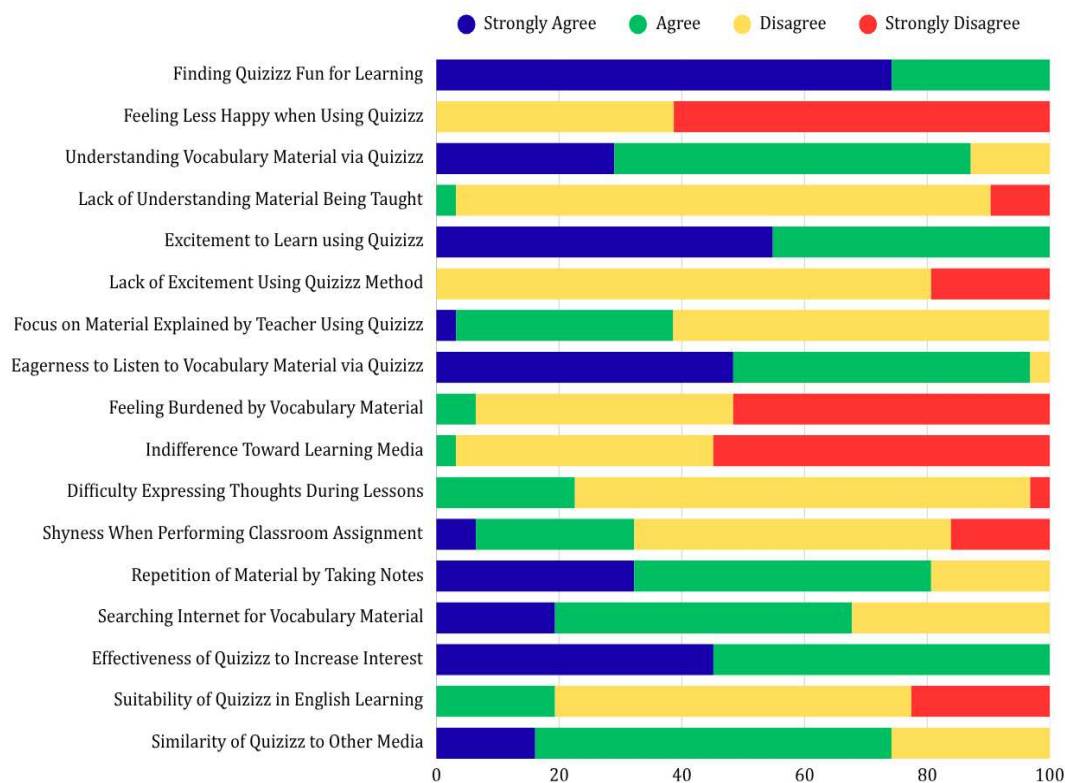


Figure 1. Student engagement, motivation, comprehension, and classroom dynamics

Finding Quizizz Fun for Learning

The majority of students found learning through Quizizz games fun. This clearly indicates that the gamified environment successfully captures students' interest by making vocabulary tasks enjoyable. Such enjoyment is crucial because positive emotional experiences enhance motivation and promote sustained learning efforts. When students enjoy the learning process, the likelihood of repeated engagement and voluntary practice increases, thereby facilitating better vocabulary retention. Moreover, the perception of fun aligns with the broader goals of gamification, which strives to transform routine or challenging educational content into stimulating activities. The interactive and competitive elements of Quizizz provide instant feedback and foster a sense of accomplishment, which many students responded to favourably. This enjoyment likely contributes to higher enthusiasm during lessons and supports a constructive learner mindset. Finally, the appeal of game-based learning tools like Quizizz also stems from their accessibility and ease of use. Students can interact with the platform on various devices at their own pace, creating personalised learning experiences. The overwhelmingly positive response here emphasises

that gamification can successfully bridge engagement gaps often seen in traditional vocabulary instruction.

Feeling Less Happy when Using Quizizz

Conversely, a considerable majority disagreed or strongly disagreed with the statement that using Quizizz made them feel less happy. This rejects concerns that gamification might disengage certain students or introduce frustration. Negative emotional responses can arise from various factors, such as poor interface design or excessive competitiveness, but these were evidently not significant issues for this cohort. The results suggest that the platform's design choices, including visual appeal, game format, and intuitive controls, met or exceeded students' expectations for a supportive learning tool. This positive affirmation can prevent the disengagement that often plagues conventional language classes, where vocabulary work is perceived as tedious. Furthermore, avoiding negative affective states during learning is crucial, as feelings of unhappiness or frustration can reduce the cognitive resources allocated to processing new information. Thus, Quizizz creates an emotionally conducive environment that likely enhances focus, persistence, and receptiveness to vocabulary input.

Understanding Vocabulary Material via Quizizz

A majority of students agreed or strongly agreed that they understood the vocabulary covered in Quizizz. This reflects the platform's effectiveness in clarifying and reinforcing vocabulary concepts. The interactive quiz format provides immediate feedback, helping students correct misunderstandings in real time and enhancing conceptual clarity. Such understanding is essential not only for vocabulary acquisition but also for using the new words appropriately in context. Gamified learning platforms encourage active recall and reinforcement, integral processes for moving information from short-term to long-term memory. Moreover, the adaptive nature of quizzes enables students to revisit difficult content, contributing to differentiated learning pathways that accommodate individual pace and needs. This flexibility further supports comprehension and retention, distinguishing Quizizz from static, lecture-based teaching methods.

Lack of Understanding Material Being Taught

Most students disagreed or strongly disagreed that they did not understand the material, suggesting that confusion was not predominant. This indicates that Quizizz effectively minimises knowledge gaps and supports comprehension through iterative,

scaffolded learning experiences. Reducing misunderstanding is critical in vocabulary learning, where unfamiliar words and contexts can easily overwhelm learners. Quizizz's game-based repetition and scaffolded questions help break complex language concepts into manageable segments. Maintaining low levels of confusion likely enhances learner confidence and fosters a proactive attitude toward language acquisition. This positive feedback loop can accelerate vocabulary mastery and encourage learners to tackle progressively challenging material with greater assurance.

Excitement to Learn using Quizizz

The data show strong agreement that students were excited to learn with Quizizz, highlighting the motivation enhancements afforded by gamified learning. Excitement acts as a powerful intrinsic motivator that drives persistence and effort in academic tasks. Emotional engagement is closely linked with cognitive engagement, and games are particularly effective at creating this synergy. The sense of challenge and achievement inherent in Quizizz quizzes evokes enthusiasm, which can transform attitudes toward language study, often viewed as dry or difficult. Furthermore, excitement boosts participation in classroom activities and can foster peer collaboration, social learning, and discussion, enriching the overall educational experience beyond individual interaction with the platform.

Lack of Excitement Using the Quizizz Method

A majority of respondents disagreed with negative perceptions that the Quizizz method fails to elicit excitement. This counters narratives indicating that gamification may lose novelty over time or fail to sustain learner interest. Sustained excitement is key to long-term engagement and deep learning. Quizizz appears able to maintain this engagement through various game mechanics such as varying question types, time constraints, and leaderboards that provide continuous stimulation. Students' rejection of boredom or lack of excitement suggests that the platform's design elements effectively leverage motivational theories, providing novelty and a sense of challenge that keep learners emotionally invested.

Focus on Material Explained by Teacher Using Quizizz

Most students disagreed with the statement that they were less focused on the material when it was explained through Quizizz, suggesting greater attentional engagement. Focus is essential for effective vocabulary acquisition, as it facilitates encoding and retrieval. The interactive, fast-paced nature of Quizizz challenges students to remain attentive,

discouraging off-task behaviour. Gamified learning environments create immediate stakes and rewards that help maintain sustained concentration and participation. Maintaining focus through engaging digital platforms helps overcome common classroom distractions and fosters an immersive experience, thereby improving linguistic processing and vocabulary comprehension.

Eagerness to Listen to Vocabulary Material via Quizizz

A majority indicated eagerness to follow vocabulary lessons presented through Quizizz, highlighting the platform's capacity to create a compelling instructional context. Eagerness is a hallmark of effective pedagogy, reflecting both interest and readiness to learn. This eagerness may stem from the combination of visual, auditory, and interactive elements that enrich Quizizz sessions, cater to multiple learning styles, and improve accessibility. Such engagement likely translates into greater information uptake, encouraging students to actively participate in discussions and reviews, which are fundamental to long-term vocabulary retention and deeper language comprehension.

Feeling Burdened by Vocabulary Material

Most students rejected feelings of burden related to vocabulary learning via Quizizz. Perceived workload burden can undermine motivation and lead to avoidance behaviours. The gamified format divides content into manageable, bite-sized challenges, reducing the cognitive load and mental fatigue associated with intensive language memorisation. By framing vocabulary learning as a game rather than a chore, Quizizz reduces anxiety and fosters positive expectations, thereby enhancing learner attitudes and promoting consistent effort.

Indifference Toward Learning Media

Most students strongly disagreed or disagreed with being indifferent toward Quizizz as a learning medium. Indifference typically signals a lack of engagement or dissatisfaction, which is a risk in digital learning environments. The intense engagement with Quizizz suggests the platform's success in capturing students' attention and fostering meaningful interaction, in contrast to the passivity often observed in non-interactive media. This active involvement offers the potential for sustained motivation and allows the social and cognitive dimensions of learning to flourish in the classroom.

Difficulty Expressing Thoughts During Lessons

Some students acknowledged difficulty expressing their thoughts, highlighting ongoing

challenges even within gamified learning contexts. Language learners often struggle to articulate their vocabulary knowledge fluently. Quizizz can indirectly enhance expressive skills by boosting vocabulary familiarity and confidence, though additional support, such as discussion tasks and peer interaction, may be needed to address verbal expression fully. Understanding this limitation encourages educators to supplement gamified vocabulary practice with communicative activities that cultivate spoken language skills.

Shyness When Performing a Classroom Assignment

While some students reported feeling shy when speaking or performing in front of peers, gamified learning platforms like Quizizz may help mitigate this by providing a low-pressure environment for practice. The anonymity and competitive but non-judgmental structure of Quizizz can foster participation without fear of embarrassment, incrementally reducing social anxiety related to language use. Complementing gamification with strategies to encourage safe, expressive opportunities could further enhance language confidence and overall classroom participation.

Repetition of Material by Taking Notes

Many students regularly revisited vocabulary material by note-taking, indicating active metacognitive strategies. This behaviour demonstrates that Quizizz's engagement encourages learners to take ownership of their learning. Effective vocabulary acquisition requires repeated exposure and reinforcement, and students' note-taking complements Quizizz's digital repetition with personal elaboration techniques. This combination of digital gamification and traditional learning strategies exemplifies how blended approaches can enhance vocabulary mastery.

Searching the Internet for Vocabulary Material

Students often sought additional information online related to vocabulary topics taught, showcasing self-directed learning tendencies fostered by Quizizz's stimulating activities. Such autonomous learning behaviours suggest the platform may inspire curiosity and resourcefulness, vital traits for lifelong language-learning success. Encouraging digital literacy alongside gamified learning helps students navigate diverse resources to deepen understanding beyond classroom instruction.

Effectiveness of Quizizz to Increase Interest

Students overwhelmingly endorsed Quizizz as effective in increasing their interest in learning vocabulary, reinforcing the platform's motivational capabilities. Interest is a

critical driver of sustained learning engagement, and Quizizz's multimedia, interactive design evidently facilitates this psychological state. This positive appraisal supports wider adoption of gamified tools within language education to promote active and enjoyable learning experiences.

Suitability of Quizizz in English Learning

The majority rejected the notion that Quizizz is unsuitable for English learning, confirming its appropriateness as an instructional tool. Its adaptability, immediate feedback, and ability to accommodate a range of skill levels make Quizizz particularly well-suited for vocabulary acquisition tasks that require iterative practice. Such suitability underscores the value of integrating digital gamification within formal language pedagogy.

Similarity of Quizizz to Other Media

While some students perceived Quizizz as similar to other media, most recognised its unique interactive and gamified features. This distinction is important, as gamification leverages game mechanics to specifically motivate behaviour and learning outcomes, differentiating it from passive multimedia content. Acknowledging this insight can guide educators to emphasise the active learning components that set gamified platforms apart, thereby maximising pedagogical impact.

DISCUSSION

The study indicates high levels of student engagement and motivation resulting from the integration of Quizizz into vocabulary lessons. Overwhelmingly, students described their learning experience as enjoyable, with fun and excitement consistently reported across responses. Importantly, this sense of fun was not simply superficial enjoyment but translated into tangible learning gains, as demonstrated by improved vocabulary understanding and the ability to recall and use new words in context. This supports theories of motivation in education, which posit that positive affective experiences enhance cognitive engagement and academic achievement (Chiu, 2023; Lu et al., 2022; Qi & Derakhshan, 2025; Skinner & Raine, 2022; Urhahne & Wijnia, 2023; Xiao & Hew, 2024). The competitive, interactive, and instant feedback features of Quizizz fostered not only greater participation but also repeated learning cycles, allowing students to internalise vocabulary more effectively.

At the same time, students rarely reported feelings of boredom, unhappiness, or

cognitive burden, problems often noted in conventional or drill-based vocabulary instruction. Instead, the findings suggest that gamification frameworks, by breaking large tasks into manageable, game-like challenges, can reduce anxiety and perceived monotony in language learning. The motivational power of digital educational games in supporting complex cognitive skills and promoting enjoyable learning environments (Barz et al., 2024; Chou et al., 2023; Ishak et al., 2023; C. Li et al., 2024). Gamified classroom strategies lead to sustained student motivation and engagement.

The results of this research align closely with an emerging consensus in the literature on the efficacy of gamification in education. Game-based digital platforms can enhance various dimensions of academic engagement, from attention to active participation. Specifically, the exploration of student response systems identified increased focus and willingness to participate, which parallels the findings here on Quizizz's ability to sustain concentration during lessons (Liu et al., 2025). Gamified learning environments can shift classroom culture from passive to interactive, helping to overcome reluctance and shyness that impede learning.

Moreover, successive Quizizz exercises led to higher rates of vocabulary retention and correct responses, which resonate with the iterative practice in a gamified context that rapidly develops and consolidates knowledge. Through adaptive cycles that allow learners to revisit challenging material, Quizizz facilitates both mastery and confidence in vocabulary usage.

The integration of Quizizz into high school English classes represents a significant progression toward learner-centred instructional strategies. The active, dynamic, and supportive environment created by Quizizz aligns well with modern constructivist learning theories, which emphasise student agency, engagement, and collaboration. The findings suggest that such digital tools not only enhance vocabulary acquisition but also cultivate intrinsic motivation and positive academic dispositions, laying a foundation for lifelong learning.

The research also underscores the importance of varied instructional strategies to address diverse learning needs (Goyibova et al., 2025; Mahmood et al., 2025). While Quizizz proved highly effective at fostering enthusiasm and attention, the persistence of some difficulties (such as challenges in verbal expression and persistent shyness among some students) points to the need for blended approaches. Supplementing game-based learning with communicative and social language tasks may further address these gaps, ensuring a

holistic language development process.

Despite its strengths, this study is constrained by several limitations. The relatively small sample size and focus on a single class from one high-performing senior high school may limit generalizability. Individual differences, such as initial vocabulary proficiency, digital literacy, or motivational baselines, may also affect outcomes and were not deeply explored. Furthermore, the novelty effect (the initial surge of interest in new technology) could influence self-reported engagement, potentially diminishing over extended use.

To advance this line of inquiry, future research should expand to include diverse school settings, multiple grade levels, and longitudinal designs that can assess the durability of increased engagement and vocabulary retention. Comparative research examining alternative gamified platforms or traditional instruction could reveal best practices and specific design features that maximise the educational benefits of gamification. Additionally, integrating qualitative data, such as classroom observations or interviews, may yield more profound insights into nuanced student experiences that quantitative surveys cannot fully capture.

CONCLUSION

The integration of Quizizz as a gamified learning tool in senior high school English vocabulary instruction has yielded important findings that substantiate the growing body of literature on the benefits of game-based language education. This research demonstrated that Quizizz does not merely introduce novelty or entertainment in the classroom; it fundamentally reshapes students' relationship with vocabulary learning by cultivating a fun, motivating, and highly engaging environment. The overwhelmingly positive student perceptions (reflected by high levels of interest, enjoyment, and focus) signal Quizizz's success in overcoming the frequent disengagement and monotony associated with traditional vocabulary instruction. Instead of rote memorisation, students actively participated, expressed excitement, and found the learning process both meaningful and rewarding.

Empirical evidence from pre- and post-intervention surveys, along with performance assessment data, supports the conclusion that Quizizz is effective in enhancing vocabulary mastery. Successive quiz results showed notable increases in correct responses, and qualitative feedback confirmed improved comprehension and retention. These outcomes align with prior studies demonstrating the efficacy of gamified platforms in supporting

cognitive development and knowledge acquisition. The findings also confirm that Quizizz's structure, combining real-time feedback, instant rewards, and competitive elements, aligns well with contemporary motivational theories and fosters an optimal learning state. Students reported reduced anxiety and a diminished sense of burden, indicating that Quizizz's game mechanics mitigate common affective barriers in language education. This study found that the benefits of gamified learning extend beyond cognitive and affective domains to encompass classroom dynamics and social participation.

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