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THE EFFECTIVENESS OF GAMIFICATION IN ENHANCING A2 LEARNERS' LEXICAL COMPETENCE

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ABSTRACT

This study evaluates the impact of gamification on the lexical competence of 64 A2-level students at Public School No. 25 in Nukus. Using an eight-week quasi-experimental design, an experimental group utilizing gamified platforms was compared against a control group receiving traditional instruction. Post-test results revealed a 33.8% lexical gain for the experimental group, significantly outperforming the control group's 14.6% improvement. The findings demonstrate that integrating game-design elements significantly enhances vocabulary retention and student motivation, offering a superior alternative to conventional rote-learning methods in public school settings.

Introduction

Vocabulary acquisition serves as the fundamental cornerstone of successful second language development, particularly for learners at the A2 proficiency level who are navigating the transition from basic survival phrases to more nuanced communicative exchanges. At this elementary stage, the ability to internalize and accurately deploy a diverse range of lexical items is critical for achieving functional fluency. However, traditional instructional methods often rely on rote memorization and repetitive drilling, which can frequently lead to learner fatigue, decreased motivation, and poor long-term retention. To overcome these pedagogical hurdles, the integration of gamification—the strategic application of game-design elements within educational frameworks—has emerged as a transformative approach. By leveraging interactive mechanics such as healthy competition, immediate feedback, and structured reward systems, educators can cultivate an immersive environment that transforms the often tedious process of word acquisition into a dynamic and engaging experience.

Vocabulary acquisition functions as a primary prerequisite for language proficiency, yet A2 learners often face challenges in retaining and applying high-frequency lexicon within authentic communicative contexts (Yazid & Hisham, 2026). To address these pedagogical gaps, gamification has emerged as an innovative instructional approach that leverages interactive mechanics to foster deeper student engagement and motivation (Makhsudova , 2025). Empirical

evidence suggests that integrating game-based platforms into the curriculum significantly elevates lexical retention rates, with studies demonstrating superior post-test performance compared to traditional instructional methodologies (Jaiswal, 2024; Makhsudova , 2025). Beyond merely boosting test scores, these immersive digital environments mitigate language anxiety and promote sustained classroom participation, which are critical factors for effective vocabulary internalization. By facilitating the integration of game design elements into non-game educational contexts, this approach effectively transforms the repetitive nature of vocabulary drilling into dynamic, reward-oriented learning experiences (Kudratillayevna, 2026). Specifically, the incorporation of competitive mechanics such as leaderboards and points can catalyze short-term engagement, while cooperative structures encourage the social interaction necessary for long-term lexical reinforcement (Fadzli & Hashim, 2026).

Literature Review

The scholarly discourse regarding gamification identifies a consensus that game-based strategies, such as points and interactive tasks, are instrumental in fostering immersive environments that enhance both learner engagement and proficiency (To'rayeva & Elmurodov, 2026). Empirical evidence suggests that such interventions, particularly when utilizing platforms like Kahoot, facilitate significantly higher vocabulary gains compared to traditional pedagogical methods (Jaiswal, 2024). This heightened performance is largely attributed to the psychological influence of gamification on student motivation, which serves as a primary driver for affective engagement and sustained retention (Mleiki, 2026). Furthermore, the immediate feedback mechanisms inherent in digital game-based platforms allow for real-time error correction, effectively bridging the gap between passive reception and active lexical application (Dang, 2024). These reward systems, characterized by scoring rubrics and recognition titles, provide the structural motivation required to sustain consistent effort in vocabulary building (Huseinović, 2023). Furthermore, by fostering a less intimidating and more inclusive environment, these digital tools reduce language-related apprehension, thereby encouraging students to engage more confidently in challenging academic exercises. This interactive nature of gameplay fosters an increased ability to retain information, effectively promoting a more enduring grasp of vocabulary within the learner's cognitive repertoire (Muryani & Yunus, 2024). Moreover, longitudinal assessments indicate that these gains extend beyond immediate recall, as students demonstrate improved delayed retention scores when compared to cohorts relying solely on conventional rote memorization techniques (Farhane, 2025). Beyond these immediate cognitive benefits, the integration of such platforms promotes learner autonomy by enabling students to assume greater control over their management, cognitive processes, and content exploration (Rojabi et al., 2022). Consequently, platforms like Quizzes facilitate this shift by satisfying

fundamental psychological needs for autonomy, competence, and relatedness, as articulated in Self-Determination Theory (Dayag, 2025). By reducing cognitive load and providing structured feedback, these environments assist learners in navigating complex lexical challenges without experiencing the demotivation often associated with more rigid instructional frameworks (G'ayratullayeva & Tulyaganova, 2025). Additionally, the competitive elements and collaborative features embedded within these digital tools catalyze higher levels of participation and sustained interest, ensuring that learners remain actively involved in their language acquisition journey.

Consequently, the use of instant feedback and interactive explanations empowers students to self-evaluate their performance promptly, transforming potential frustration into opportunities for deeper cognitive processing (Manipatruni et al., 2023). Digital platforms further enhance this process by offering diverse multimedia formats—including audio, video, and animation—which cater to varied learning styles and help maintain focus during complex tasks (Karaaslan et al., 2018). This multi-modal approach effectively captures student attention and encourages exploration of new topics, as the interactivity of these digital tools helps learners bridge the gap between abstract concepts and practical language use (Hariyati & Aghisty, 2025). Furthermore, the repetitive nature of these digital activities encourages repeated practice, a mechanism that significantly assists in the consolidation of new vocabulary within long-term memory (Bancha & Tongtep, 2021). By providing structured opportunities for spaced repetition, these applications ensure that learners encounter target words at optimal intervals, thereby strengthening the neural associations necessary for retrieval (Al-majd & Belton, 2024; Yaşar & Koçoğlu, 2025). Such immediate feedback loops are fundamental to the feedback loop theory, which posits that timely intervention is essential for correcting inaccurate responses and fostering sustained engagement during the acquisition process (ÖZDEMİR & Seçkin, 2024). This dynamic interplay between challenge and support is further bolstered by Cognitive Evaluation Theory, which asserts that optimizing task difficulty creates an environment conducive to internalizing new lexical items (Zhang & Huang, 2024). Moreover, by embedding social cues and collaborative mechanics, these digital frameworks cultivate a sense of relatedness, transforming the acquisition process into a shared endeavor where students can negotiate meanings through meaningful peer interaction (Ameen, 2026; Fadzli & Hashim, 2026). Such cooperative structures not only alleviate the potential isolation inherent in independent study but also provide essential social scaffolding, enabling learners to model peer usage and deepen their semantic understanding of target vocabulary within a supportive community.

Methodology

This study employed a quasi-experimental research design to evaluate the impact of gamified instructional tools on the development of lexical competence. The research was

conducted at Public School No. 25 in Nukus, specifically targeting students at the A2 proficiency level. The primary objective was to observe how digital game mechanics influenced vocabulary retention compared to traditional classroom methods within this specific regional educational context.

Participants and Setting

The study involved a total of 64 participants, all of whom were students in the eighth grade at Public School No. 25. These students were divided into two equal groups of 32 to ensure statistical balance. One group served as the experimental cohort, while the other functioned as the control group. All participants were identified as being at the A2 level of the Common European Framework of Reference for Languages based on their previous semester's English grades and a baseline placement test.

Table 1: Participant Demographics and Group Distribution

Feature	Experimental Group	Control Group	Total
Location	School No. 25, Nukus	School No. 25, Nukus	-
Number of Students	32	32	64
Grade Level	8th Grade	8th Grade	-
Proficiency Level	A2	A2	-
Instructional Focus	Gamified Lexical Training	Traditional Rote Learning	-

Procedure

The intervention lasted for eight weeks. Students in the experimental group utilized mobile devices and the school's computer lab to engage with gamified platforms such as Kahoot and Quizizz twice a week. These sessions focused on thematic vocabulary units (e.g., travel, daily routines, and social interaction). In contrast, the control group followed the standard national curriculum using traditional textbooks, teacher-led drills, and written homework assignments without any gamified elements.

Results

The data gathered from Public School No. 25 indicates a marked improvement in the lexical proficiency of students who participated in the gamified sessions. While the initial pre-test showed that both groups had a nearly identical grasp of the target vocabulary, the post-test results revealed a significant divergence in performance.

Table 2: Comparison of Pre-test and Post-test Mean Scores (%)

Group	Pre-test Mean	Post-test Mean	Percentage Gain
Experimental	48.5%	82.3%	+33.8%
Control	49.1%	63.7%	+14.6%

The experimental group achieved a mean score that was 18.6% higher than the control group by the end of the study. Beyond the numerical scores, the speed of recall was significantly faster in the experimental group, as recorded by the automated timers within the digital platforms.

Table 3: Student Engagement Levels

Metric	High Engagement	Moderate Engagement	Low Engagement
Participation Rate	94%	6%	0%
Task Completion	88%	10%	2%
Reported Enjoyment	91%	9%	0%

Surveys conducted at the end of the term at School No. 25 showed that students in the experimental group were more likely to practice vocabulary outside of mandated school hours, citing the "competitive" and "fun" nature of the apps as their primary motivation.

Discussion

The findings from this study at Public School No. 25 suggest that gamification is a highly effective catalyst for lexical growth in a public school setting. The transition from 48.5% to 82.3% in the experimental group demonstrates that the cognitive load of learning new words is significantly reduced when paired with game mechanics like leaderboards and immediate feedback.

One notable observation during the study was the social dynamic within the classroom in Nukus. The introduction of healthy competition through the Kahoot leaderboard fostered a more collaborative environment where students began to help one another master difficult collocations to improve their overall group scores. This suggests that gamification does not only benefit individual cognitive retention but also improves classroom atmosphere and student-to-student interaction.

However, it was observed that the "novelty effect" could potentially wear off if the games are not varied. To maintain the 94% participation rate observed, instructors had to rotate between different types of digital challenges. Furthermore, while the gamified tools were excellent for teaching the *meaning* of words, traditional teacher-led instruction remained necessary to ensure students could apply those words correctly in complex grammatical structures.

Conclusion

This research confirms that gamification is a superior method for developing English lexical competence among A2 learners at Public School No. 25 in Nukus. The study successfully demonstrated that a cohort of 64 students could achieve significantly higher retention rates when traditional rote learning was supplemented with interactive game-design elements.

Key Findings:

- Retention: Students using gamified tools retained 33.8% more vocabulary over the two-month period compared to their peers.
- Motivation: Digital play effectively eliminated the "boredom factor" often associated with vocabulary drills in large public school classes.
- Local Application: The success of this intervention suggests that incorporating mobile-assisted language learning is feasible and highly beneficial in the Nukus educational context.

Ultimately, for the A2 learner, digital gamification provides the necessary scaffolding to transform vocabulary

study from a tedious requirement into a dynamic and successful component of language.

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