

Improving Learner Autonomy Through Digital Gamification in Uzbekistan Secondary Schools

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Abstract: *This paper examines the integration of digital gamification tools, specifically Quizizz and Kahoot, to enhance learner autonomy and engagement in English as a Foreign Language (EFL) classrooms in Uzbekistan. Despite the prevalence traditional rote-learning methods in the regions still dominate the regional pedagogical landscape, this study focuses on a 12-week intervention involving 60 secondary school students. By facilitator to guide and support, students were encouraged to take ownership of their vocabulary acquisition. The results indicate a significant increase in student participation and a positive shift in attitudes toward independent study. The paper concludes that while digital tools are effective, their success depends heavily on institutional support and consistent internet access, providing a roadmap for future blended learning models in the region.*

Keywords: *Digital Gamification, Learner Autonomy, EFL, Quizizz, Kahoot, Blended Learning, Secondary Education*

1. Introduction

In the current educational climate of Central Asia, particularly in Uzbekistan, there is a nationwide push to modernize English language instruction. The presidential decree on promoting foreign language learning has set high benchmarks for both teachers and students. However, a persistent challenge remains: the challenges in student motivation and autonomy in rural and semi-urban classrooms. Traditionally, the classroom environment is teacher-centered, leaving little room for students to explore the language creatively or independently.[1]

The rationale for this intervention stems from the need to bridge the gap between curriculum requirements and student engagement. Many students view English as a difficult academic subject rather than a tool for global communication. Lamb observed that students in non-English-speaking environments often lack the integrative motivation necessary for sustained language development. By introducing digital gamification, we aim to lower the “affective filter” and create a low-stakes, high-reward environment consistent with the principles outlined by Deterding et al. [2]

Gamification—broadly defined as the application of game design elements in non-game contexts—has been shown to increase engagement, persistence, and learning outcomes when implemented thoughtfully. Addressing this issue is vital because without intrinsic motivation, learners are unlikely to reach the advanced proficiency levels required for international academic and professional success. This paper explores how simple, accessible technology can transform a passive classroom into an active learning hub.[3]

2. Methodology

The intervention was conducted over one academic term at a public secondary school. The participants were 9th-grade students (n=60) divided into a control group and an experimental group. The primary tool used was “Quizizz”, chosen for its self-paced feature, which allows students to

complete tasks at their own pace on mobile devices, even outside school hours.[4] The study employed a quasi-experimental design with pre- and post-test measurements to assess vocabulary retention and attitudinal change toward independent learning.

The 12-week intervention was structured across three distinct phases:

Phase 1 – Training (Weeks 1–4):

Students were introduced to the Quizizz platform. Unlike traditional homework, they were given guest-based assignments where they could earn points and badges for reinforcing specific vocabulary sets related to the national curriculum.[5]

Phase 2 – Peer Competition (Weeks 5–8):

A live Classroom Battle was held every Friday. This shifted the power dynamics; the teacher acted as a commentator and guide, while students led the session through their performance. Kahoot! Was introduced during this phase for synchronous competitive engagement.

Phase 3 – Student-Created Content (Weeks 9 -12):

In the final month, students were asked to create their own quizzes for their peers. This required them to research synonyms, definitions, and distractors, moving them from passive consumers to active content creators.[6]

The intervention utilized a blended learning approach. While the core grammar was taught via traditional methods, the reinforcement and vocabulary building were entirely gamified. The teacher's role evolved into that of a data analyst, using the app's built-in reports to identify which linguistic structures were most difficult for the class, allowing for more targeted and efficient face-to-face instruction.[7]

3. Results and Discussion

Reflecting on the intervention, the most immediate outcome was the visible shift in classroom atmosphere. Students who were previously silent began to participate, driven by the competitive but friendly nature of the gamified tasks. Quantitatively, the experimental group showed a 15% higher retention rate in vocabulary tests compared to the control group.[8]

This finding aligns with existing literature on gamification in educational settings. The point-scoring, leaderboard mechanics, and badge rewards created an environment consistent with self-determination theory, fostering intrinsic motivation. Wang and Lieberoth similarly found that the audio-visual feedback features of Kahoot! significantly increased student concentration and enjoyment in classroom settings. The asynchronous feature of Quizizz proved particularly valuable in extending learning beyond the classroom walls - a crucial factor given the limited contact hours in the Uzbekistan national curriculum. This echoes Prensky's argument that digital natives respond more readily to game-based pedagogies than to conventional drill-and-practice methods.[9]

Yildirim reported comparable gains in motivation and achievement following gamification interventions in EFL contexts, noting that the competitive yet low-stakes nature of game mechanics reduced anxiety and promoted risk-taking in language production. Pham and Nguyen further documented that vocabulary retention rates improved significantly when gamified review tools were integrated into blended learning cycles - a pattern consistent with the gains observed in the present study.[10] From a cognitive standpoint, Baddeley's model of working memory suggests that the multimodal stimuli offered by platforms such as Quizizz—combining visual, auditory, and interactive elements—facilitate deeper encoding of new lexical items.[11]

However, the intervention faced significant challenges. “Digital equity” remains a concern; not all students had access to high-speed internet at home, leading to some frustration. Furthermore, some students focused more on the game mechanics than on the learning content, rushing through questions to accumulate points without fully processing the language. This suggests that gamification must be

carefully balanced with reflective metacognitive tasks.[12]

Recommendations and Implications

Based on the findings of this study, the following recommendations are offered for policymakers, educators, and institutional stakeholders in Central Asia:

- **Inclusion and Access:** To ensure inclusion, schools must provide “offline” alternatives or computer lab time for students without personal devices. This is a prerequisite for scaling gamification initiatives in under-resourced contexts.[13]
- **Teacher Training:** The project should prioritize training teachers not only in how to operate digital platforms, but in how to integrate them meaningfully into a broader pedagogical strategy aligned with curriculum outcomes.[14]
- **Promoting Learner Autonomy:** This model proves that Central Asian students are ready for autonomous learning if the medium is culturally and technologically relevant to their lives. The implication is clear: the future of English in the region lies in hybridity - combining local pedagogical strengths with global digital innovations.[15]

4. Conclusion

This paper demonstrated that digital gamification is a potent tool for accelerating English learning in Uzbekistan. By fostering learner autonomy - understood here in the tradition of Holec and Little as the capacity and willingness to take charge of one's own learning - and by increasing engagement through competitive but cooperative mechanics, tools such as Quizizz can help bridge the gap between traditional curricula and modern communicative needs. The key message is that technology should not replace the teacher but empower them to address individual student needs more effectively, consistent with Mayer's evidence-based framework for educational game design.

Moving forward, a larger-scale study involving multiple regions in Central Asia would be beneficial to determine the long-term impact on standardized test scores. Future research should also investigate the longitudinal sustainability of motivational gains achieved through gamification, drawing on Wigfield and Eccles's expectancy-value framework to examine how perceived usefulness and enjoyment interact over extended periods. The potential role of artificial intelligence in personalizing gamified learning pathways for EFL learners also warrants systematic exploration.

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