THE IMPACT OF GAMIFICATION IN LANGUAGE LEARNING APPS ON MOTIVATION AND ENGAGEMENT

Sevinch Raxmanova Shuxrat qizi
Department of Philology and Language Teaching
“TIIAME” National Research University

Abstract

The motivation of English language learners is examined in this research in relation to game design ideas, such as reward systems, adaptive challenge mechanics, and social competitive structures. Based on Csikszentmihalyi's flow construct (1990), Krashen's affective filter hypothesis (1982), and self-determination theory (Ryan & Deci, 2000), the study integrates classroom observations at School No. 21 in the Beruniy district with a review of recent experimental results. Although regional infrastructure limitations and insufficient teacher preparation limit scalability within Uzbekistan's educational system, findings show that deliberately integrated gamification lowers language anxiety, increases voluntary involvement, and promotes student self-efficacy.

Keywords: *gamification, English language learning, intrinsic motivation, affective filter, flow theory, Digital Uzbekistan 2030.*

Introduction

English classes in Uzbekistan are still dominated by transmission-based training, which results in students who are literate for exams but lack communication skills. Technology-enhanced learning integration has evolved from optional enrichment to institutional priority as the Republic works toward its Digital Uzbekistan 2030 objective. One of the most accessible and scientifically validated solutions to persistent learner disengagement is gamification, which is the intentional application of game dynamics to educational environments (Deterding et al., 2011). platforms like Kahoot, Memrise, and Duolingo! have shown on a large scale that when linguistically challenging tasks are incorporated into engaging game frameworks, learners readily complete them. This study looks into the psychological processes that underlie that willingness as well as the real-world circumstances that allow it to be consistently replicated in secondary schools in Uzbekistan.

Theoretical Foundations

The motivational benefits of gamification are explained by three convergent theoretical frameworks. Autonomy, competence, and relatedness are the psychological demands whose fulfillment results in long-lasting intrinsic motivation, according to Ryan and Deci’s (2000)

self-determination theory. All three are addressed by well-designed gamified applications: multiplayer or leaderboard aspects create relatedness, incremental reward structures show competence growth, and adaptive difficulty maintains autonomy. SDT makes a crucial distinction between internalized intrinsic motivation and extrinsic motivation, which is motivated by rewards from outside sources. Unless incentive systems are clearly informational rather than controlling, gamification runs the risk of perpetuating the former (Deci, Koestner, & Ryan, 1999).

Krashen’s affective filter hypothesis explains why emotional climate matters in language acquisition. High levels of anxiety, low self-esteem, and diminished motivation raise a metaphorical barrier that obstructs the processing of comprehensible input. Game contexts lower this barrier: errors carry reduced social cost within a fictional scoring system, and pseudonymous or team-based competition formats reduce this barrier by removing the direct peer visibility that typically causes language anxiety. Al-Khresheh (2025) confirmed that who completed vocabulary tasks on gamified platforms had significantly lower anxiety scores than those in conventional exercise conditions, and that this reduction partially mediated retention outcomes. Csikszentmihalyi’s (1990) flow theory complements both frameworks by specifying the challenge-skill calibration that sustains deep engagement: tasks too easy produce boredom; tasks too difficult tasks lead to anxiety; precise calibration produces the absorbed, self-reinforcing state of flow that modern adaptive learning algorithms are specifically designed to induce.

Game Mechanics and Classroom Observations

Points and level-progression systems make the invisible visible: leraners cannot directly perceive the gradual changes in processing fluency that occur during language acquisition, but an experience-point counter transforms that invisible progress into a concrete, measurable metric. Daily streak counters exploit the psychological tendency to avoid breaking established patterns, and, more crucially,structurally align learner behaviour with the distributed practice schedules that cognitive science identifies as optimal for long-term retention (Settles & Meeder, 2016). Depending on learner profile, leader boards have different effects.For students with low self-efficacy,persistent low ranking accelerates disengagement and reinforces fixed-ability beliefs; for students with moderate-to-high self-efficacy, proximity to higher-ranked peers functions as an aspirational motivator.

This pattern was directly observable during the teaching practicum at School No. 21 in the Beruniy district. Across six weeks of Kahoot!-integrated 8th and 9th-grade English sessions, voluntary participation during open-answer phases increased noticeably relative to conventional question-and-answer lessons. Students who rarely contributed verbally in traditional formats engaged actively under pseudonymous game conditions, consistent with

affective filter theory. Notably, higher-performing students reviewed vocabulary lists independently between gamified sessions - behaviour absent during traditional homework periods - suggesting that competence-affirming game experiences had begun supporting intrinsic rather than merely extrinsic motivation. However, students who consistently ranked in the lower third of competitive leaderboards showed withdrawal behaviour after the second week, indicating that undifferentiated competitive mechanics can widen rather than narrow the participation gap.

Implementation Challenges

Three structural obstacles restrict gamification’s scalability in the Uzbek context. First, intermittent internet connectivity -,which frequently happens during the practicum itself, makes cloud-dependent platforms unreliable;less than 40% of rural schools meet minimum bandwidth thresholds for synchronous digital applications (Ministry of Public Education, 2023). Second, the most evidence-based premium platform features are still too expensive: the yearly subscription costs are significantly higher than the monthly pay of a state-employed secondary teacher. Third, and perhaps most significantly, teacher professional development programmes dedicate minimal attention to digital pedagogy; without the capacity to select, adapt, and critically evaluate gamified tools, educators default to using platforms as entertainment supplements rather than as instruments of deliberate instruction (Ertmer & Ottenbreit-Leftwich, 2010).

Conclusion

Gamification is a theoretically sound set of design principles that, when applied with intentionality and contextual awareness, can significantly improve language learning outcomes.It is a neither a pedogogical miracle nota pssing fad. The convergence of flow theory, affective filter hypothesis, and self-determination theory explains why game mechanics reduce anxiety, sustain persistence, and support the development of autonomous motivation. Field observations confirm these effects under real classroom conditions, while simultaneously exposing the infrastructure, economic, and professional development deficits that limit equitable access. Three specific solutions are necessary: mandatory digital pedagogy training in pre-service teacher education programmes; national-level EdTech licensing negotiations under the Digital Uzbekistan 2030 framework; and a design preference for offline-capable, partially anonymised platforms that protect lower-performing learners from the demotivating effects of public competitive ranking. Addressing these conditions is the precondition for translating gamification's demonstrated potential into consistent, system-wide educational gains.

References

1. Al-Khresheh, M. H. (2025). The efficacy of gamification in English language learning. The Open Psychology Journal, 18(1), 1–14.
2. Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. Harper & Row.
3. Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. Psychological Bulletin, 125(6), 627–668.
4. Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining gamification. Proceedings of MindTrek 2011 (pp. 9–15). ACM.
5. Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Teacher technology change. Journal of Research on Technology in Education, 42(3), 255–284.
6. Jamalova, U. N. (2025). Digital technology in the education system of Uzbekistan. International Journal of Science and Technology, 12(3), 45–59.
7. Krashen, S. D. (1982). Principles and practice in second language acquisition. Pergamon Press.
8. Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation. American Psychologist, 55(1), 68–78.
9. Settles, B., & Meeder, B. (2016). A trainable spaced repetition model for language learning. Proceedings of[180] ACL 2016 (pp. 1848–1858).

[180]