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DIGITAL GAMIFICATION IN GRAMMAR TEACHING: APPLYING KAHOOT! AND QUIZLET ACROSS A1–B2 LEARNERS

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Abstract. Teaching English grammar in mixed-proficiency EFL classrooms is challenging because A1 and B2 learners often receive the same instruction, overwhelming beginners and boring advanced students. This review examines whether Kahoot! and Quizlet can improve grammar learning. Studies from 2020–2026 suggest that gamification lowers anxiety, speeds retrieval, and supports differentiated pacing, especially for learners aged 16–19. However, excessive competition and time pressure may increase stress and encourage guessing. The article concludes that a blended model combining self-paced preparation with competitive retrieval offers the most balanced approach for mixed-level young adult instruction.

Keywords: Gamification, grammar instruction, young adults, mixed proficiency levels, Kahoot!, Quizlet, affective filter, EFL/ESL, Dual Coding Theory, formative assessment.

Introduction

A typical grammar lesson in an English as a Foreign Language (EFL) context often begins with hesitation and silence. The instructor asks a question about verb forms, conditionals, or reported speech, and only a few students volunteer an answer aloud. Some hesitate because they are unsure of the rule itself, while others possess the correct answer but avoid speaking because they fear making mistakes publicly in front of their classmates.

In educational environments characterized by mixed-proficiency groups, this hesitation and instructional friction become dramatically visible. Higher-proficiency students often dominate the interactive spaces of the classroom, whereas lower-proficiency learners gradually withdraw from interaction. This pattern is particularly pervasive among adolescents and young adults between the ages of sixteen and nineteen. At this developmental juncture, peer judgment carries an immense emotional weight. Students frequently associate grammatical errors with personal embarrassment and a perceived loss of social status, rather than recognizing them as a natural phase of linguistic development. Consequently, classroom participation and visible engagement plummet, even when individual motivation to master the English language remains relatively high.

Compounding this affective barrier is the pedagogical challenge posed by the diversity of language proficiency within a single classroom space. Many EFL teachers operate within

institutional constraints where some students struggle to construct simple present sentences, while their immediate classmates are fully capable of discussing hypothetical situations or writing structured essays. Traditional teacher-centered instruction, uniform grammar worksheets, and repetitive drills are fundamentally unequipped to handle this variance successfully. The lower-level students quickly become cognitively overwhelmed, while advanced learners grow disengaged and bored by excessive repetition.

Over the last decade, gamification has received increasing attention from researchers and practitioners as a possible response to these difficulties. In educational contexts, gamification generally refers to the integration of game-related elements—such as points, leaderboards, badges, competition, and instant feedback—into non-game learning environments. Platforms such as Kahoot! and Quizlet have achieved immense popularity because they are accessible, flexible, and relatively easy to implement in language classrooms.

However, enthusiasm surrounding educational technology sometimes leads to exaggerated claims. Gamification does not automatically improve teaching quality, nor does it replace sound pedagogy. While highly competitive, fast-paced game activities are intensely motivating for certain extroverted or advanced learners, they can trigger stress and cognitive anxiety in reflective or lower-proficiency students. Therefore, the central pedagogical question is not whether gamification is universally effective, but rather under what specific design constraints and blended conditions it can support grammar learning most successfully. This article explores how Kahoot! and Quizlet can be used together to support grammar instruction in mixed-proficiency EFL classrooms by balancing competition with reflective practice.

Theoretical framework

To evaluate the true educational utility of gamified grammar instruction, it is necessary to move beyond surface-level observations of classroom fun and analyze the underlying cognitive, behavioral, and emotional mechanisms that dictate language acquisition. Three theoretical architectures provide a conceptual basis for this analysis: Dual Coding Theory, Structural Feedback Loops, and the Affective Filter Hypothesis.

Dual Coding Theory. Originally developed by Allan Paivio, Dual Coding Theory proposes that information is processed more effectively when verbal and visual channels work together rather than separately. Gamified digital platforms naturally activate both channels simultaneously by combining written prompts, color, movement, sound effects, and immediate scoring systems. As noted by Al Khresheh (2024), this dual coding effect directly improves working memory capacity during language-form acquisition. For grammar instruction, this

multimodal immersion can be particularly useful for beginner learners who struggle to process abstract metalinguistic explanations in a textbook. Instead of encountering isolated structural rules, students interact with grammatical forms through repeated visual and verbal exposure.

Kahoot!, for instance, combines written questions, answer selection shapes, timing indicators, and score changes in a single activity. Quizlet similarly operationalizes dual coding by enabling learners to connect words, sentence structures, and visual prompts across repeated practice sessions. As a result, students process language through multiple pathways, which helps hold basic patterns in working memory.

Structural Feedback Loops. Behavioral and cognitive psychologies emphasize that the timing of corrective feedback is a crucial determinant of error correction and schema adjustment. In conventional grammar instruction, students often complete physical worksheets or exercises and receive corrections later, sometimes after the active cognitive connection between the error and the rule has weakened.

Gamified platforms, by contrast, provide immediate feedback loops. The student knows instantly whether their answer was correct or incorrect, allowing them to recognize mistakes while the grammatical structure remains active in working memory. This instant validation supports student engagement and encourages repeated participation. Lee and Baek's (2023) meta-analysis of gamification research quantified this advantage, reporting a medium effect size ($g = 0.517$) for gamified methods on English language proficiency compared to traditional delivery methods. This functional architecture is further examined by Taş (2025), who found that digital grammar applications optimize the balance between automated feedback mechanics and rule internalization.

Shifting the Affective Filter. In adolescent language education, the emotional climate of the classroom functions as a gatekeeper for cognitive processing. According to the Affective Filter Hypothesis, anxiety, self-doubt, and fear of public evaluation interfere with language acquisition. Dichev and Dicheva (2017) emphasize that emotional factors influence grammar acquisition just as heavily as purely often cognitive dimensions, suggesting that traditional settings exacerbate public errors. Adolescents and young adults aged 16–19 are highly sensitive to peer reactions, making public error correction a significant psychological barrier to participation.

Gamified digital environments partially reduce this pressure by shifting classroom attention away from direct teacher evaluation and toward shared activity. As shown by Zhang and Hasim (2023), shifting focus from who is correct to who is scoring points changes the social dynamics, which significantly lowers the affective filter. A wrong answer in a quiz environment

feels less threatening than a public oral correction during traditional teacher questioning. Furthermore, quasi-experimental data from Noori (2025) demonstrate that gamified structural platforms reduce grammar-specific learning anxiety while yielding significantly higher post-test structural accuracy scores, helping beginner learners build baseline confidence.

Methodology and literature review

This article employs a qualitative systematic synthesis rather than a statistical meta-analysis. The primary goal is to identify recurring pedagogical patterns, systematic classroom limitations, learner emotional responses, and direct teaching implications across recent studies.

Screening Protocol and Reliability Standards. The literature search was conducted between January and March 2026 across major international indexes, including Google Scholar, ERIC, and Scopus. Search terms included combinations such as "gamification and EFL grammar," "Kahoot and grammar instruction," "Quizlet and language learning," and "digital game-based learning in EFL classrooms." The initial database query produced approximately sixty-eight potentially relevant publications.

Each title and abstract was subject to screening based on participant age, geographic context, and instructional focus on language form. Studies were included if they were satisfied with five distinct parameters:

1. They were peer-reviewed and published between 2020 and 2026.
2. They evaluated gamification within formal EFL or ESL educational settings.
3. They either focused directly on grammar instruction or indirectly on grammatical development through language-form acquisition.
4. The participants belonged primarily to adolescents or young adult age groups (15–25).
5. The studies provided sufficient methodological detail to support qualitative synthesis.

To maximize methodological reliability and maintain academic rigor, strict quality exclusion criteria were applied: all undergraduate theses, poorly indexed publications, and non-peer-reviewed white papers were systematically excluded from the final synthesis. Applying these filters narrowed the empirical matrix to a core set of highly respected, peer-reviewed, and widely recommended publications that ensure reliable triangulation.

Analytical Procedure. Each selected source was coded according to structural platform, participant age, learner proficiency level, research design, reported benefits, and documented systemic limitations. Findings were then grouped into broader thematic categories: cognitive effects, affective outcomes, and pedagogical tensions. Practical recommendations

were derived only from findings that appeared in at least two independent sources, ensuring proper triangulation of the evidence base.

Comparative pedagogy & platform analysis

Gamification cannot operate effectively in an instructional vacuum; it must be integrated into broader, established language-teaching frameworks rather than used independently. When implemented without clear methodological intention, digital quizzes risk degenerating into mechanical drills, reinforcing isolated structural memorization at the expense of functional language use.

Integration with Communicative and Task-Based Frameworks. Communicative grammar teaching emphasizes meaningful interaction over the isolated memorization of abstract structural rules. Gamified tools support this environment by functioning as targeted reinforcement following interactive communication. For instance, a Kahoot! quiz can be used to reinforce structures that students previously encountered during pair discussions, collaborative speaking projects, or oral tasks.

Similarly, task-based learning typically prioritizes meaning-focused communication, while gamified activities focus more heavily on retrieval speed and repeated exposure. Because of this difference, gamification functions most effectively as form-focused reinforcement following communicative tasks rather than as the central teaching framework itself.

Spaced Repetition and Flipped Classroom Synergy. Quizlet's functional architecture directly reflects the psychological principles of spaced repetition and retrieval practice. As explored by Hung (2018), repeated exposure to grammar structures in varied chunks over extended timelines significantly strengthens longer-term retention, particularly among beginner learners who require frequent recycling of forms before automaticity can occur.

This architecture supports the flipped classroom model. By assigning individualized Quizlet modules as asynchronous homework, students can familiarize themselves with necessary vocabulary and grammar independently before participating in classroom-based explanation and review sessions. Consequently, valuable face-to-face instructional hours can focus more heavily on clarification, interaction, and active feedback rather than first exposure to grammatical rules. As established by Öcel (2023), the structured use of asynchronous chunking patterns provides a critical foundation for stabilizing language acquisition processes.

Direct Structural Comparison. To utilize these systems in a blended ecosystem, teachers must understand their contrasting technical and psychological architectures, as outlined by Bicen and Kocakoyun (2018) regarding core game dynamics:

Platform Dimension	Kahoot! Specification	Quizlet Specification
Temporal Mode	Synchronous, whole-group delivery.	Asynchronous, individualized delivery.
Pacing Control	Teacher-controlled or uniform speed.	Learner-controlled, self-paced progression.
Primary Motivation	High-intensity external competition.	Intrinsic mastery and retrieval practice.
Social Dynamics	Highly visible leaderboard rankings.	Private, non-visible individualized study.
Instructional Phase	Later-stage review and automation.	Early-stage priming and form recycling.

4. PRACTICAL APPLICATIONS:

The Blended Weekly Cycle. To operationalize these insights within mixed-proficiency classrooms, teachers can move away from uncoordinated applications and adopt a structured, predictable instructional schedule. The following five-day weekly cycle provides a balanced framework designed for programs meeting for 45–60 minutes per session:

Table 1: The Blended 5-Day Grammar Integration Matrix

Day	Instructional Activity	Core Digital Tool	Target CEFR Focus	Pedagogical Rationale
Monday	Vocabulary and Grammar Priming	Quizlet (Learn & Flashcards)	A1–A2 Learners	Builds lexical schema before introducing new syntax architectures (Öcel, 2023).
Tuesday	Self-Paced Grammatical Chunking	Quizlet (Match & Write)	A2–B1 Learners	Low-stakes repetition with no time pressure; students repeat tasks until mastery.
Wednesday	Explicit Modeling & Clarification	Traditional Board/Interactive Slides	All Levels	Direct rule explanation necessary for establishing meta-linguistic awareness.

Thursday	Whole-Class Competitive Retrieval	Kahoot! (10–12 Contextual Items)	B1–B2 Learners	Automates syntactic retrieval under timed, highly engaging classroom conditions.
Friday	Formative Assessment & Targeted Production	Kahoot! (Graded) + Written Exit Ticket	All Levels	Combines real-time digital diagnostic tracking with individual written performance.

Specific Adaptations for A1–A2 Learners. To prevent lower-proficiency students from experiencing cognitive overload or evaluation anxiety, teachers must adapt activities carefully:

- **Deactivate Timers Completely:** Instructors should remove strict time limits within Quizlet and adjust, generous timing settings during initial class reviews to give lower-proficiency students adequate cognitive processing time.
- **Utilize Practice Modes:** Prior to entering a synchronous classroom competition, A1–A2 students should be encouraged to explore identical question sets in a solo, non-timed practice mode without visible leaderboards to reduce retrieval anxiety.
- **Incorporate Team-Based Competition:** Instructors can implement team-based play modes rather than individual rankings on Kahoot! to distribute performance pressure and foster cooperative peer interaction.

Advanced Adaptations for B1–B2 Learners. Advanced language learners require deeper cognitive challenges to maintain engagement and develop complex syntactic fluency:

- **High-Level Transformation Questions:** Quizzes designed for upper-intermediate students should focus on clause-level error correction, sentence transformation, or contextualized grammar use rather than simple recognition exercises.
- **Student-Generated Content Loops:** B1–B2 students can contribute by creating quiz items themselves, which encourages deeper processing of grammatical structures and supports active peer-teaching loops.
- **Productive Input Modes:** Advanced students should be guided to use "Write" or open-input study modes on Quizlet rather than multiple choice, forcing deeper syntactic processing than passive recognition.

Results and discussion

A qualitative synthesis of peer-reviewed empirical research reveals consistent patterns regarding the instructional impact of gamification, alongside notable tensions and pedagogical contradictions.

Cognitive Gains and Accuracy Changes. The empirical consensus indicates that gamified language learning environments yield moderate to medium positive effects on general language proficiency, classroom participation, and short-term syntax retention. Landmark statistical meta-analyses, such as the study conducted by Lee and Baek (2023), quantify this trend by establishing a medium effect size associated with gamified environments across multiple independent language studies.

Furthermore, comprehensive reviews by Wang and Tahir (2020) note that gamified implementation frequently increases learner attention, classroom engagement, and short-term retention during classroom review activities. These positive cognitive developments occur because well-designed digital tasks align directly with active information processing pathways, translating abstract grammatical parameters into structured, interactive environments.

Affective Outcomes and the Anxiety Paradox. The interaction between digital gamification and learner anxiety is complex. Extensive literature indicates that gamified environments reduce general language learning anxiety by obscuring individual failure and reframing grammar practice as a collaborative, low-stakes game. Shifting the pedagogical focus away from direct teacher evaluation lowers the affective filter and encourages hesitant students to participate.

However, recent classroom observations by Alluhaybi (2026) reveal an anxiety paradox: highly competitive, fast-paced gamified features introduce clear temporal stress for a subset of learners. Reflective students and those with lower initial proficiency levels often experience heightened stress when subjected to rapid countdown timers. Rather than processing grammar rules carefully, some learners guess answers quickly in order to keep pace with classmates. In these scenarios, competition interferes with deeper learning and acts as an instructional barrier.

Resolving Pedagogical Contradictions. This insight indicates that the educational value of gamification is not absolute; it depends entirely on implementation sequencing. Time pressure can benefit the automation of structural forms, but it is counterproductive during the initial schema acquisition phase.

To resolve this contradiction, instructors must adopt a blended sequence where self-paced, low-pressure activities explicitly precede high-speed whole-class retrieval exercises. By organizing the instructional cycle so that Quizlet allows for slow, self-paced repetition early on,

students can establish basic cognitive familiarity before facing the fast-paced, social competition of a classroom Kahoot! match. This sequencing captures the motivational benefits of gamification while protecting lower-proficiency students from temporal overload.

Limitations of the evidence base

While the pedagogical benefits of a blended gamification model are supported, researchers and practitioners must remain aware of structural limitations within the current evidence base:

- **Absence of Longitudinal Tracking:** As noted by Zainuddin et al. (2020), a significant portion of gamification research focuses on short-term learning gains rather than long-term retention. Consequently, it remains unclear whether increased engagement translates into durable language acquisition over time.
- **Target Demographic Gaps:** While this synthesis focuses on young adults aged 16–19, many available top-tier studies examine university populations instead. Although these groups share developmental similarities, actual secondary classroom dynamics and peer pressures can differ in important ways.
- **Context Isolation:** Top-tier literature rarely evaluates Kahoot! and Quizlet within a single, unified experimental control group. Conclusions regarding their blended integration must rely on thematic qualitative synthesis and pedagogical reasoning rather than direct side-by-side empirical testing.
- **The Digital Divide:** Inequitable technological access remains a systematic challenge across educational institutions. Reliable internet connections, device availability, and digital literacy vary significantly, meaning what functions smoothly in one institution may be difficult to implement in another.

Conclusion

Gamification is not educational magic. It cannot transform a confusing, disorganized grammar lesson into a successful one, nor can it replace sound pedagogical frameworks and active teacher guidance. The actual value of tools like Kahoot! and Quizlet relies on thoughtful classroom integration and a clear understanding of their cognitive and affective limitations.

The primary takeaway from this qualitative synthesis is that one size does not fit all in mixed-proficiency classrooms. High-speed synchronous platforms are excellent for diagnostic review and retrieval automation, but they can induce anxiety in reflective or lower-proficiency students. Asynchronous, self-paced flashcard systems are valuable for independent schema building and confidence reinforcement, but they lack the social energy that drives sustained classroom engagement.

The solution to this pedagogical dilemma is to avoid choosing one tool exclusively. Instead, teachers should deliberately blend them: using Quizlet to build familiarity and confidence through self-paced review, and Kahoot! to support retrieval practice and classroom interaction once grammatical structures have been introduced. For young adults aged 16 to 19, classroom social dynamics and peer interactions are highly influential. These students care deeply about peer perception and fear public failure.

While gamified activities do not eliminate these emotional tensions entirely, they reframe them productively. When grammar practice is structured as a collaborative game, making a mistake is no longer a public failure of ability; it is simply a wrong answer in a quiz. This shift can fundamentally transform classroom engagement. The ultimate objective of gamification is to foster low-anxiety instructional spaces where students feel safe enough to take risks, experiment, and make real progress with language learning.

References

1. AlKhresheh, M. H. (2024). The cognitive and motivational benefits of gamification in English language learning: A systematic review. *The Open Psychology Journal, 18*. https://doi.org/10.2174/0118743501359379240507085650
2. Alluhaybi, M. (2026). When fun meets focus: Comparing Kahoot and worksheets in Saudi EFL reading instruction. *Frontiers in Education*. https://doi.org/10.3389/feduc.2026.1795606
3. Bicen, H., & Kocakoyun, Ş. (2018). Perceptions of students for gamification approach: Kahoot as a case study. *International Journal of Emerging Technologies in Learning, 13*(2), 72–93. https://doi.org/10.3991/ijet.v13i02.7467
4. Dichev, C., & Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. *International Journal of Educational Technology in Higher Education, 14*(1), 1–36. https://doi.org/10.1186/s41239-017-0042-5
5. Hung, H. T. (2018). Gamifying the flipped classroom using game-based learning materials. *ELT Journal, 72*(3), 296–308. https://doi.org/10.1093/elt/ccx055
6. Lee, J. Y., & Baek, M. (2023). Effects of gamification on students' English language proficiency: A meta-analysis of research in South Korea. *Sustainability, 15*(14), Article 11325. https://doi.org/10.3390/su151411325

7. Noori, A. (2025). Gamification and social media: Transforming English grammar learning in EFL classrooms. *Journal of Social Sciences & Humanities, 2*(1), 86–100. https://doi.org/10.62810/jssh.v2i1.60
8. Öcel, K. (2023). A systematic review of Quizlet in vocabulary acquisition. *Inquiry in Education, 15*(2). https://eric.ed.gov/?id=EJ1405123
9. Taş, H. Ö. (2025). Digital game-based learning for grammar in EFL contexts: A systematic review. *DergiPark, 18*(1), 220–238. https://dergipark.org.tr
10. Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning: A literature review. *Computers & Education*. https://doi.org/10.1016/j.compedu.2020.103818
11. Zainuddin, Z., Chu, S. K. W., Shujahat, M., & Perera, C. J. (2020). The impact of gamification on learning and instruction: A systematic review of empirical evidence. *Educational Research Review*. https://doi.org/10.1016/j.edurev.2020.100326
12. Zhang, S., & Hasim, Z. (2023). Gamification in EFL/ESL instruction: A systematic review of empirical research. *Frontiers in Psychology, 13*. https://doi.org/10.3389/fpsyg.2022.1030790

QRAMMATİKA TƏDRİSİNDƏ RƏQƏMSAL OYUNLAŞDIRMA: A1-B2 SƏVİYYƏLİ ÖYRƏNƏNLƏR ÜÇÜN KAHOOT! VƏ QUIZLET TƏTBİQİ

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Xülasə. Qarışıq səviyyəli EFL siniflərində ingilis dili qrammatikasının tədrisi çətindir, çünki A1 və B2 öyrənənləri tez-tez eyni təlimatı alırlar, bu da yeni başlayanları və inkişaf etmiş tələbələri darıxdırır. Bu icmalda Kahoot! və Quizlet-in qrammatika öyrənməsini yaxşılaşdıra biləcəyi araşdırılır. 2020–2026-cı illərdə aparılan tədqiqatlar göstərir ki, oyunlaşdırma narahatlığı azaldır, öyrənməni sürətləndirir və xüsusilə 16-19 yaşlı öyrənənlər üçün fərqli templəri dəstəkləyir. Lakin həddindən artıq rəqabət və vaxt təzyiqi stressi artıra və təxminləri təşviq edə bilər. Məqalədə öz-özünə hazırlığı rəqabətli öyrənmə ilə birləşdirən qarışıq modelin qarışıq səviyyəli gənc yetkinlərin təlimi üçün ən balanslı yanaşma təklif etdiyi qənaətinə gəlinir.

Açar sözlər: Oyunlaşdırma, qrammatika tədrisi, yeniyetmə və gənc öyrənəci, qarışıq səviyyə, Kahoot!, Quizlet, affektiv filtr, EFL/ESL, Dual kodlaşdırma nəzəriyyəsi, formativ qiymətləndirmə.