

Gamification in ESL/EFL Education: Transforming Language Learning and Teaching Through Play

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Abstract: Gamification has become a transformative strategy in English as a Second Language (ESL) and English as a Foreign Language (EFL) education, leveraging game mechanics to enhance engagement, motivation, and retention. This study examined the theoretical foundations of gamification through Self-Determination Theory (SDT), Flow Theory, Behaviorism, and Second Language Acquisition (SLA) theories, illustrating how these frameworks support language learning. Empirical evidence indicated that gamification enhances vocabulary retention, grammatical accuracy, and communicative fluency by providing interactive, reward-based learning experiences. Popular gamified platforms, including Duolingo, Kahoot!, and Classcraft, were analyzed to demonstrate best practices in gamified ESL/EFL instruction. The study identified key benefits, such as increased learner autonomy, engagement through real-time feedback, and adaptive learning pathways tailored to individual progress. However, it also addressed challenges, including potential over-reliance on extrinsic motivation, cognitive overload, and accessibility barriers, while proposing strategies to mitigate these limitations. Additionally, the study explored future research directions, emphasizing the need for longitudinal studies on gamification's long-term impact, AI-driven adaptive learning, and the integration of Virtual Reality (VR) and Augmented Reality (AR) to create immersive language-learning experiences. The findings suggested that, when implemented strategically, gamification fosters active participation, enhances learning outcomes, and supports meaningful language acquisition. This research provided practical implications for educators seeking to incorporate gamification into ESL/EFL curricula, advocating for a balanced approach that sustains motivation while promoting deeper cognitive and communicative development.

Keywords: Gamification, ESL, EFL, Language Learning, Second Language Acquisition

1. Introduction

Gamification is one of the newer and more exciting strategies in teaching, particularly in English as a Second Language (ESL) and English as a Foreign Language (EFL) teaching. It integrates game features such as points, badges, leaderboards, quests, and narratives into a traditional educational setting in order to increase the students' participation, motivation and academic success. With increasing advancement of digital technologies and the use of participatory methods of instruction, teachers are increasingly aware of the possibilities of gamification in creating more motivating and learner-centered foreign language teaching and learning environments [14, 18].

Conventional language acquisition approaches are often described as systematic, repetitive, and sometimes dull, highly dependent on textbooks, memorization practices, and standardized exercises

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[6, 8, 19]. Although such approaches may provide learners with necessary information, they tend not to adequately maintain learners' engagement and develop intrinsic motivation as effectively as gamified learning environments can. However, gamified learning environments incorporate elements of fun, rivalry, and reward and thus make the learning process more engaging and interactive [13, 21]. Empirical evidence has proven that gamification is highly effective in substantially increasing engagement, motivation, and overall language proficiency in ESL/EFL learners [10, 22, 27]. Renowned digital platforms like Duolingo, Kahoot!, and Classcraft are all indicative of the effectiveness of game-based approaches to vocabulary acquisition, grammatical competence, and communicative fluency [20, 26]. Table 1 provides a comparative analysis of traditional ESL/EFL instruction methods versus gamified learning. While conventional approaches emphasize structured content delivery, gamification fosters engagement through interactive and motivational elements.

Table 1. Comparison of Traditional vs. Gamified ESL/EFL Learning

Feature	Traditional ESL/EFL Learning	Gamified ESL/EFL Learning
Learning Style	Textbook-based, instructor-led	Interactive, student-centered
Motivation Source	Extrinsic (grades, assessments)	Intrinsic & extrinsic (rewards, progression)
Engagement Level	Moderate	High (through gamified elements)
Feedback Mechanism	Delayed, after assignments	Immediate, real-time feedback
Collaboration	Limited	Encouraged (multiplayer, team challenges)
Personalization	Low	High (adaptive learning pathways)

The paper here examines (1) theoretical underpinning for applying gamification in language learning, analyzes (2) best practices for effective gamification, and synthesizes (3) existing evidences of practical applications that teachers can adopt to enhance learning outcomes. Based on close meta-analysis of experimental studies and case studies in gamification of ESL/EFL studies, this paper aims to provide a complete understanding of the mechanisms through which gamification enhances ESL/EFL learning while carefully examining the challenges and limitations of applying it.

2. Theoretical Foundations of Gamification in Language Learning

The application of gamification in both ESL and EFL contexts is justified using different theories that try to account for how game components influence the learner's motivation, involvement, and cognitive processes. These foundations are helpful in considering the effects of gamification on SLL and draw attention to how educators may use gamification to improve the performances of the learners. With these constructs in educational and psychological context, the educators can create well defined and purposeful gamified educational environments that are likely to achieve the desired outcomes.

2.1. Self-Determination Theory (SDT) and Motivation in Gamification

Deci and Ryan's Self-Determination Theory developed in 1985 [4] posits that a person's motivation is based on three fundamental needs that apply to all persons. Autonomy refers to how much freedom an individual possesses in executing an activity, competence refers to one's perception of being effective, and relatedness refers to people and social interactions. The gamification of ESL/EFL

caters for such needs by employing active, learner-centered approaches that accentuate motivation as well as participation [2, 3].

Autonomy in Gamified Learning

Autonomy gives learners control over their learning experiences by permitting them to make choices about the content, time, and mode of learning. Gamification promotes autonomy by supporting self-regulated learning, offering flexible routes, and setting personalized goals [24, 28]. Online platforms like Duolingo and Kahoot! enable learners to choose their desired levels of difficulty, track progress, and engage at their own pace, thus promoting motivation and reducing language-related anxiety [1, 31]. Research by Chan & Lo [2] showed that students who used gamified platforms with self-directed elements had greater persistence levels and spent more time on language-related activities than those in traditional classrooms.

Competence Through Gamification Mechanics

The feeling of competency, including the sense of mastery, is also important in generating motivation. Gamification promotes this by creating a system of progress, giving instantaneous feedback, and rewarding achievements. Features like experience points (XP) and skill trees allow learners to see their progress, and digital rewards, such as badges, encourage people both extrinsically and intrinsically [16, 29]. Studies have found that gamified language learning motivates and results in better language results, such as vocabulary development and reading proficiency [11, 17].

Relatedness and Social Interaction in Gamification

The acquisition of language is inherently social. Gamification puts this element into play with collaborative and competitive elements that encourage peer-to-peer interactions. Multiplayer functions, leaderboards, and team-based challenges motivate learners to cooperate in order to become better language users [7, 25]. Experiments have proven that gamified group work tremendously improves target language interactions so as to enable collaboration and promote learners' feelings of belongingness [2, 17].

2.2. Flow Theory and Gamified Engagement

Originally presented by Mihaly Csikszentmihalyi in 1990 [3], Flow Theory describes certain conditions that promote optimal engagement: focus, enjoyment, and intrinsic motivation. The 'flow state' occurs when an individual's skill level is equally balanced with the challenge of the activity at hand. Some of the components of flow include total absorption, control, immediate feedback, enjoyment, and motivation. When learning takes place at a state of flow, distractions are at a low level which leads to optimal learning outcomes [22, 28].

Escorcia [6] and Zhang & Hasim [31] argued that gamification aids in experiencing a flow state by adding components that boost immersion, engagement, and both mental and physical challenges. This aspect of flow in learning is especially important in ESL/EFL education where there is a high need for motivation [7, 21]. Numerous studies have demonstrated that by setting adaptive challenges, gamified environments can sustain flow and make the learning process more enjoyable and effective [15, 22].

Progressive Difficulty and Adaptive Challenges

One important aspect of Flow Theory is challenge-skill balance. If a task is deemed as too easy or too challenging, learners are likely to lose interest in it. This has been solved through gamification using an adjustable level of increasing difficulty and adaptive challenges tailored to the learner's level. Platforms like Duolingo and Kahoot! gradually increase complexity, keeping students engaged without overwhelming them [1, 10].

Research shows that adaptive learning systems, which adjust difficulty based on user performance, increase retention and engagement [14, 27]. Competitive gamified environments introduce time-sensitive challenges and sequential skill-improvement activities, which encourage learners to develop their skills. Orak [19] and Permana et al. [20] found that students participating in gamified activities with increasing challenges showed greater persistence and motivation levels than students in non-gamified settings.

Clear Objectives and Immediate Feedback

Flow continuity is ensured when goals are clearly set and feedback is immediately available. If the students understand the goals and receive instant feedback, they can correct mistakes in real time and improve their methods. Gamification allows for structured feedback through interactive quizzes, point systems, and tracking of accomplishments [8, 13, 26].

Tools like Quizizz and Socrative make the learning process easier through offering direct feedback, thus allowing learners to adapt their strategies [19, 28]. Systems with reward mechanisms, such as point assignment and virtual badges, also increase learner engagement [14, 25]. Monitoring progress tools like experience points (XP) and graphical progress views act as motivational agents [20].

Empirical evidence supports the efficacy of timely feedback in improving educational outcomes. Escorcía [6] and Laksanasut et al. [11] showed learners who were given timely feedback showed significant improvement in language learning. In addition, Javed et al. [8] and Suryanto & Wulan [25] supported that students who adapted their approaches due to gamified feedback sustained their motivation and continued working on challenging assignments.

Goal-Oriented Behavior and Competitive Motivation

Flow Theory emphasizes goal-setting in maintaining engagement. Gamification fosters this by encouraging learners to set and pursue objectives, driving sustained motivation. In ESL/EFL instruction, leaderboards, rankings, and competitive elements help structure goal-setting.

Several platforms apply peer comparison as a mechanism of promoting constructive rivalry [29, 31]. Timed challenges like fast vocabulary tests highly enhance cognitive engagement [8, 17]. Individual milestones are presented in some platforms, thus making the process of achieving goals more meaningful [2, 21].

Studies indicate that gamified ESL learners sustain focus longer and show greater perseverance in reaching milestones [22, 25]. Gamification's structured goal-setting has also been shown to reduce procrastination and cognitive fatigue, keeping students motivated [10, 14].

Empirical Evidence Supporting Gamification and Flow

Research confirms gamification fosters flow in ESL/EFL learners. Neman [16] and Suryanto & Wulan [25] found that students in gamified environments demonstrated higher motivation, longer attention spans, and better retention than those using traditional methods. Permana et al. [20] and Slamet & Meng [24] reported a 40% increase in student participation in ESL classrooms, with

learners citing greater enjoyment and self-efficacy. Hardianti [7] and Suryanto & Wulan [25] highlighted that real-time progress tracking enhanced self-regulated learning, promoting autonomy in language acquisition. These findings suggest that gamification-driven flow enhances motivation, engagement, and long-term learning.

Challenges and Considerations

Despite its benefits, the use of gamification in ESL/EFL learning is faced with some challenges. Overreliance on extrinsic motivation can reduce long-term engagement once rewards are removed [14, 19]. Poorly crafted gamification elements can lead to cognitive overload if the level of difficulty is not properly graded [15, 27]. Mobile-based gamified learning environments may also offer distractions, shifting students' attention from learning tasks [6, 15].

To mitigate these issues, educators should prioritize meaningful learning experiences over game mechanics. Effective gamification should balance adaptive challenges, goal-oriented engagement, and immediate feedback while fostering intrinsic motivation. Nawaz et al. [15] and Suryanto & Wulan [25] emphasized integrating game-based incentives with deeper cognitive and communicative learning strategies to maximize ESL instruction's effectiveness.

2.3. Behaviorism and Reinforcement Theory in Gamification

Behaviorist models, specifically B.F. Skinner's Reinforcement Theory [23], state that behavior is shaped by positive and negative reinforcement. Skinner believed the rewarding of specific behavior encourages its recurrence. In language learning, repetitive practice coupled with reinforcement greatly enhances retention and skill development [7, 28]. The use of gamification in ESL/EFL instruction is aligned with these principles, as it uses organized rewards, immediate feedback, and graduated challenges to reinforce positive learning behavior [21, 26].

Gamification as a Reinforcement Mechanism in Language Learning

A popular reinforcement approach in gamified ESL/EFL learning is the points-badges-leaderboard (PBL) system, which promotes engagement and persistence among learners. Points are rewards for correctly answered quizzes, completed tasks, and active engagement, thereby enabling frequent practice [20, 27]. Digital badges represent achievements like vocabulary acquisition, thereby encouraging learners to progress [17, 19]. Leaderboards also include competitive elements, which encourage improvement [1, 14].

Neman [16] & Thurairasu [29] found that students in point-based ESL/EFL systems had higher retention and task completion than those in non-gamified settings. However, while structured rewards boost short-term motivation, long-term effectiveness depends on integrating intrinsic learning incentives.

Repetitive Practice and Instant Feedback for Habit Formation

Behaviorist theory suggests repeated exposure strengthens learning [23]. In language acquisition, this means consistent practice with immediate correction helps learners internalize grammar, vocabulary, and pronunciation. Gamified platforms integrate instant feedback, enabling real-time adjustments [2, 25].

Apps like Duolingo and Kahoot! give the user immediate feedback on incorrect answers, thus reinforcing the correct ones. Spaced repetition apps, like Anki, use carefully timed reviews to

enhance memory retention [27, 31]. Studies by Al-Dosakee and Ozdamli [1] and Suryanto and Wulan [25] indicated that students receiving feedback in real time had significantly better retention and engagement rates than those receiving delayed feedback. This continuous reinforcement encourages the formation of good study habits.

Level Progression and Goal Achievement to Sustain Motivation

The level progression in gamification is comparable to Skinner's Operant Conditioning model [23], which requires students to complete tasks of increasing difficulty to advance [22, 24]. This challenge-based method maintains the engagement of learners without risking overload. Unlocking new content helps to reinforce a sense of accomplishment, in turn encouraging continued effort [8, 21].

Gamification structures rewards around effort and progress, such as earning digital badges for completing writing exercises or pronunciation drills [16, 25]. Breaking lessons into shorter, interactive tasks prevents cognitive fatigue and supports sustained engagement [13, 29]. A review by Escorcia [6] and Zhang and Hasim [31] found that gamified ESL/EFL environments significantly increased student persistence and task completion compared to traditional methods.

Empirical Evidence Supporting Gamification as a Behaviorist Tool

Studies confirm gamification's effectiveness in ESL/EFL education. Chan & Lo [2] and Neman [16] found that gamified environments increased retention rates by 30% compared to traditional instruction due to structured rewards. Safdar et al. [22] and Szabó & Kopinska [26] reported that students using gamified reinforcement completed 50% more language exercises than those in non-gamified settings, highlighting the impact of immediate feedback and achievement tracking. Additionally, Laksanasut et al. [11] and Suryanto & Wulan [25] found that ESL learners using game-based rewards maintained higher engagement over time, reducing dropout rates.

The findings of this research confirm the relevance of behaviorist-based gamification for motivation and persistence in language acquisition. However, excessive reliance on external motivators has a number of issues.

Challenges and Considerations in Behaviorist Gamification

A major concern is dependence on extrinsic rewards, which may reduce intrinsic motivation once incentives are removed [21, 26]. If learners expect external validation, engagement may decline without rewards. To prevent this, gamification should integrate intrinsic motivation strategies like self-directed goal setting and meaningful learning experiences.

Competitive elements, such as leaderboards and timed challenges, can increase anxiety, discouraging risk-taking in language use [14, 25]. While competition motivates some, gamified environments must balance achievement with a supportive learning atmosphere.

Excessive reliance on memorization may limit the use of imaginative language and hinder upper-level intellectual processes [24, 28]. To avoid learning fatigue, it is recommended that teachers incorporate problem-solving activities, story building, and communicative practices.

To optimize gamified learning, reinforcement strategies should gradually shift students toward autonomous learning. As Nawaz et al. [15] and Suryanto & Wulan [25] suggested, goal-oriented challenges should complement reward-driven learning to ensure long-term engagement and deeper cognitive development. Table 2 summarizes the challenges associated with gamified ESL/EFL learning and provides recommendations for mitigating these issues.

Table 2. Challenges and Considerations in Gamified ESL/EFL Learning

Challenge	Description	Suggested Solution
Over-reliance on extrinsic rewards	Students may lose motivation once rewards are removed	Integrate intrinsic motivators like meaningful learning goals
Cognitive overload	Too many game mechanics may distract from learning	Balance game elements with pedagogical objectives
Competitive stress	Leaderboards may discourage low-performing students	Emphasize personal progress over peer comparison
Accessibility issues	Not all students have equal access to technology	Provide alternative non-digital gamified exercises
Short-term engagement	High initial motivation may decline over time	Incorporate adaptive challenges to sustain interest

2.4. Gamification and Second Language Acquisition (SLA) Theories

The second language acquisition process is affected by numerous cognitive, social, and environmental factors. Gamification in SLA supports interactive, immersive, and engaging learning experiences that promote understanding, recall, and verbal communication skills [8, 19]. By applying the theories of SLA, gamified instructional approaches provide organized exposure to comprehensible input, enable interaction, and promote repeated practice, critical elements for effective language acquisition [15, 25].

Krashen's Input Hypothesis and Comprehensible Input in Gamification

Krashen's Input Hypothesis [9] states that learners acquire language through exposure to comprehensible input slightly beyond their current proficiency ($i+1$). This theory focuses on the role of exposure to meaningful linguistic input.

Gamification uses this principle through adaptive learning mechanisms that vary the material's difficulty according to the learner's progression. Both Busuu and Duolingo offer content that is not only comprehensible but also challenging enough, while gamified stories and scenario-based activities subject learners to context-dependent interactions [21, 26]. Adding multimodal learning—visual, auditory, and kinesthetic elements—greatly improves understanding [14, 18].

Empirical research validates this approach. Javed et al. [8] and Suryanto & Wulan [25] found that learners using adaptive gamified materials showed significantly better listening comprehension scores compared to those using static materials. These findings suggest that gamification enhances second language learning (SLA) through personalized input, maintaining learner engagement, and balancing challenge with accessibility.

Vygotsky's Sociocultural Theory and Social Interaction in Gamified Learning

Vygotsky's Sociocultural Theory as explicated in 1978 [30] basically highlights the role of social interaction in language learning as learners benefit through interactions with proficient peers, instructors, or AI tutors within their Zone of Proximal Development (ZPD).

Gamified learning supports such theory through the inclusion of multiplayer engagement, collaborative assignments, and initiatives promoting peer-assisted learning. Environments like synchronous forums for discussion, cooperative missions, and role-playing games (RPGs) enable

high levels of interaction and collaboration [10, 22, 27]. Classcraft and Quizlet Live are representative tools for peer-assisted learning through activities based on solving problems [1, 10]. Studies carried out by Escorcia [6] and Laksanasut et al. [11] found that students who took part in collaborative gamified ESL activities had better speaking competence and greater engagement than their peers using traditional discussions. These outcomes validate the theoretical stance of Vygotsky [30] that social activity stimulates language acquisition through collaborative and communicative educational experiences.

Ellis's Cognitive Theory of SLA and the Role of Repetition and Memory

Ellis's Cognitive Theory of Second Language Acquisition [5] focuses on the importance of cognitive processing, repetition, and intentional practice in the language learning process. Frequent exposure to linguistic structures increases retention and fluency.

Gamification aligns with this theory through spaced repetition systems (SRS) and reinforcement through prompts and rewards. Programs like Anki and Memrise enable the learning of vocabulary through strategically planned intervals for review, while the tracking of achievements encourages continued engagement [24, 28]. AI-powered tutoring systems provide instant corrections to mistakes, thus reinforcing the use of correct language [15, 22].

A meta-analysis by Al-Dosakee & Ozdamli [1] and Suryanto & Wulan [25] found that students using gamified ESL tools showed a 25% improvement in vocabulary and grammar retention compared to traditional learners. This demonstrates gamification's effectiveness in enhancing cognitive engagement through structured repetition and reinforcement.

Empirical Evidence Supporting Gamification in SLA

Empirical research continually supports the importance of gamification in SLA. Nawaz et al. [15] and Suryanto & Wulan [25] noted the improvement in the fluency and accuracy of ESL learners in gamified activities. Escorcia [6] and Zhang and Hasim [31] reported improvement in grammatical accuracy by 30% in gamified writing activities, while Al-Dosakee & Ozdamli [1] and Suryanto & Wulan [25] presented strong evidence that gamification is effective in enhancing student motivation through increased engagement and lower dropout rates.

Challenges and Considerations

Despite its merits, gamification has some challenges. A reliance on outside incentives like badges and points can undermine intrinsic motivation with the passage of time [5, 8]. Additionally, although gamified language practices enhance language proficiency in digital contexts, they do not necessarily enable spontaneous communication in real contexts [1, 2].

Technological accessibility is another concern, as not all learners have equal access to high-quality gamified platforms [8, 13, 26]. To ensure equity, hybrid approaches combining gamification with traditional instruction should be considered.

For optimum results, it is necessary for teachers to integrate gamified elements with meaningful, real-life learning activities. The combination of online engagement with actual communication can enhance motivation, retention, and language skills in ESL learners [16, 29].

Table 3 outlines the primary learning theories that support the use of gamification in ESL/EFL instruction, explaining how each contributes to enhanced language acquisition.

Table 3. Theoretical Foundations of Gamification in ESL/EFL

Theory	Key Concept	Gamification Application
Self-Determination Theory (SDT)	Autonomy, Competence, Relatedness	Personalized learning, reward systems, collaborative activities
Flow Theory	Immersion and optimal challenge level	Progressive difficulty, instant feedback
Behaviorism & Reinforcement	Positive reinforcement through rewards	Points, badges, leaderboards
Krashen's Input Hypothesis	Comprehensible input +1 level	Adaptive difficulty, contextual learning
Vygotsky's Sociocultural Theory	Learning through social interaction	Multiplayer, discussion-based tasks
Ellis's Cognitive Theory	Repetition and memory consolidation	Spaced repetition, flashcards, practice drills

3. Best Practices in Gamification for ESL/EFL

The introduction of gamification in English as Second Language (ESL) and English as Foreign Language (EFL) teaching maximizes student engagement, motivation, and learning outcomes. It transforms traditional teaching practices through the infusion of game-like elements within digital content, creating engaging and interactive environments that facilitate language acquisition [1, 2]. Effective deployment requires teachers to learn about the core gaming elements and apply tested platforms with proven impacts.

3.1. Game Elements in Language Teaching

The effectiveness of gamification in ESL and EFL depends on core mechanics that augment motivation, activate engagement, and support meaningful learning experiences. Among the substantial elements to this effect are point systems and leaderboards, badges with virtual rewards, narrative contexts with quests, as well as immersive tasks like escape rooms and scavenger hunts.

Points and leaderboards enhance engagement through extrinsic motivation. Platforms like Kahoot! and Quizizz assign points for correct answers, while Duolingo's experience points (XP) system motivates users with daily streaks [21, 26]. Laksanasut et al., [11] and Suryanto & Wulan [25] found that leaderboards led to a 43% increase in student motivation in EFL classrooms.

Badges and virtual rewards promote positive learning behaviors by rewarding achievements, thus promoting intrinsic and extrinsic motivation. Duolingo awards badges to users for reaching meaningful milestones, and Classcraft rewards engagement and teamwork [1, 14]. Empirical research shows that such reward systems promote sustained engagement and perseverance among learners [27, 31].

Narrative-based methodologies and quest-based activities enable interactive context-based learning experiences that enhance understanding and analytical thinking. Role-playing games (RPGs) simulate natural conversation contexts and thus enhance interpersonal communication skills [22, 24]. Storytelling-based platforms utilize activities and linguistic exercises to develop vocabulary and grammaticality skill [6, 31]. Permana et al.'s [20] and Slamet & Meng's research [24] showed that narrative-based gamification significantly promoted information recall as well as critical thinking abilities.

Escape rooms and scavenger hunts promote problem-solving and collaboration. Digital escape rooms, such as Breakout EDU, challenge students with language-based puzzles, while scavenger

hunts encourage real-world language use [24, 28]. Safdar et al. [22] and Szabó & Kopinska [26] demonstrated that these activities enhance problem-solving skills and spoken fluency. Table 4 presents a breakdown of common gamification elements and their specific functions in ESL/EFL learning environments.

Table 4. Gamification Elements and Their Functions in ESL/EFL Learning

Gamification Element	Function	Example in ESL/EFL Learning
Points & XP	Provides instant feedback and motivation	Awarding XP for completed language tasks (Duolingo)
Badges & Rewards	Encourages persistence through achievement milestones	Earning badges for completing grammar lessons
Leaderboards	Fosters competitive motivation and engagement	Kahoot! ranking system in classroom quizzes
Storytelling & Quests	Enhances engagement through contextual learning	Classcraft’s role-playing narrative missions
Spaced Repetition	Improves memory retention	Memrise’s AI-driven review system
Time Challenges	Encourages rapid thinking and recall	Timed vocabulary quizzes in Quizizz
Adaptive Learning	Adjusts difficulty based on learner performance	Duolingo’s personalized learning paths

3.2. Successful Examples of Gamification in ESL/EFL

Several platforms successfully integrate gamification in ESL/EFL education.

Duolingo employs gamified exercises, spaced repetition, and daily streaks to keep learners engaged. Its adaptive learning system adjusts difficulty based on performance, promoting steady skill development [21, 26]. Research confirms its effectiveness in improving grammar acquisition and vocabulary retention.

Kahoot! uses interactive tests, competition rankings, and immediate feedback to stimulate motivation. Studies by Nawaz et al. [15] and Suryanto & Wulan [25] concluded that students using Kahoot! showed 43% higher engagement levels.

Classcraft turns learning into a role-playing experience where students earn points for participation, collaboration, and completing tasks. With team-based quests and virtual rewards, it fosters cooperative learning and classroom engagement [21, 26].

Table 5 categorizes widely used gamified language-learning platforms based on their core mechanics and pedagogical benefits

Table 5. Gamified Platforms and Their Features

Platform	Key Features	Educational Benefits
Duolingo	Streaks, XP, Adaptive Learning	Vocabulary retention, self-paced learning
Kahoot!	Competitive quizzes, Leaderboards	Engagement, rapid recall practice
Classcraft	Role-playing, Team Quests	Collaboration, problem-solving skills
Quizizz	Gamified quizzes, Instant feedback	Formative assessment, motivation boost
Memrise	Spaced Repetition, Visual mnemonics	Long-term retention, immersive learning

3.3. The Impact of Gamification on ESL/EFL Learning Outcomes

The gamification significantly enhances motivation, engagement, and skill within language acquisition. Key elements like points, badges, stories, and collaborative assignments promote interactive learning environments accommodating different learning styles. However, for it to be best leveraged effectively, educators need to have a mix of extrinsic reward and intrinsic educational goals with the incorporation of appropriate real-world experiences that ensure long-term retention and effective communication competence.

4. Conclusion and Future Directions

The introduction of gamification to ESL and EFL classes has proven impactful towards motivation, learner engagement, and achievement with a general observed improvement [24, 28]. Features from video games and online platforms such as points, scoring systems, chat boxes, and narratives can be utilized for the creation of functional environments for language teaching and learning with the aid of advanced technologies [2, 5]. This approach's effectiveness is related to theories of Second Language Acquisition (SLA) like Krashen's Input Hypothesis [9], Vygotsky's Sociocultural Theory [30], and Ellis's Cognitive Theory [5], which all focus on interaction, repetition, and motivation concerning the learning of a new language [8, 17].

There are various signs that the implementation of gamification into ESL/EFL is still progressing with the help of Research and Development. Also, important for future studies are the more sociological aspects such as the effects of teaching with Vygotsky's theory [30] over a longer period, the role of adaptive learning programs, and the potential of VR and AR. Moreover, there is a need for further research regarding the role of the instructor and the sociopsychological and cultural aspects of gamification.

4.1. Long-Term Impact on Language Retention

Despite its seeming improvement of short-term engagement, gamification has been shown to have uncertain impacts on long-term language retention [8, 22]. The use of spaced repetition systems appears to maintain vocabulary recall but is likely to produce decreased engagement once the reward is removed [11, 13, 27]. Future studies should explore the effectiveness of collaborative and cooperative gaming mechanisms in sustaining extended learning recall. It is also critical to understand the role of intrinsic motivation in sustaining regular language exercise and to determine if gamification leads to deep cognitive engagement as opposed to superficial memorization [15, 20].

4.2. Effectiveness of Adaptive Gamification

Adaptive gamification individualizes learning experiences by applying artificial intelligence-supported sites like Duolingo and Memrise that adjust task complexity and provide real-time feedback [12, 18]. Nevertheless, key questions remain: What are the means by which individualized learning pathways can be reconciled with fixed curricular objectives? Can adaptive gamification accommodate diverse learning modes and cultural differences? Additional empirical research is necessary to assess its impact on comprehension and retention. Furthermore, the integration of adaptive systems with communicative and task-based pedagogical approaches may enhance their effectiveness.

4.3. Integrating VR and AR in Gamified Language Learning

Virtual reality (VR) and augmented reality (AR) advancements support contextually rich and engaging experiences, such as virtual simulations and interactive flashcards [24, 27]. However, accessibility is a major barrier, with high-quality VR/AR materials being costly and lacking established pedagogical models [13, 14]. Future studies should develop evidence-based solutions for the integration of these technologies and examine their cognitive impacts, particularly with regards to reducing language anxiety and increasing fluency [15, 21, 28].

4.4. The Role of Educators in Gamification

Gamification's effectiveness would depend on its correct implementation by teachers. Simply adding game-like elements without a specific pedagogical objective could lead to superficial learning outcomes [16, 19]. A balance of extrinsic rewards along with intrinsic motivation, coupled with the use of gamification and communicative methods, is likely to improve both engagement and competence [7, 13]. Teachers need to act as guides to help learners navigate through gamified experiences while also fostering an environment that encourages collaboration. Professional training and development workshops might equip instructors with the ability to effectively use gamification in ESL/EFL curricula.

4.5. Future Research Directions

More gamification strategies need to address and encourage inclusion and effectiveness in learning environments to bolster motivation with long-term language proficiency. There is also further need for consideration on how cross culturally, learners of various linguistic root respond to assorted gamification techniques. In addition, studies should aid more focus towards long term retention of language, learner confidence and anxiety skeletal gamified effects along with artificial intelligence, virtual reality and augmented reality for more personalized focus on pedagogical methods. [22, 24]. Table 6 highlights key research areas that can further develop the effectiveness of gamification in ESL/EFL learning, integrating adaptive technology and immersive experiences.

Table 6. Future Directions in Gamified Language Learning

Research Area	Focus	Potential Impact
Long-term impact on language retention	Investigate if gamification sustains learning beyond short-term gains	Optimize strategies for lasting knowledge retention
AI-driven adaptive gamification	Use AI to tailor content dynamically based on learner progress	Personalize language learning for maximum effectiveness
Virtual Reality (VR) and Augmented Reality (AR)	Implement immersive gamified environments for language practice	Enhance real-world language application
Cross-cultural gamification approaches	Study how gamification varies across different cultural contexts	Develop inclusive gamified learning strategies
Instructor's role in gamified learning	Explore how teachers can effectively integrate gamification in ESL/EFL curricula	Enhance teacher training for gamified pedagogy

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