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Gamification in English Language Teaching

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ABSTRACT: Gamification in English Language Teaching (ELT) incorporates game elements to enhance learner engagement, motivation, and interactivity. By leveraging competition, achievement, and collaboration, it provides clear objectives, instant feedback, and progress tracking, creating a dynamic learning environment. The evolution of gamification spans from traditional board games and early computer-assisted learning in the 1980s to contemporary digital platforms and mobile applications. The primary aim is to foster motivation, skill development, and effective communication in ELT. Benefits include heightened motivation, personalized learning paths, and improved language skills through interactive activities. Psychological theories such as Skinner's operant conditioning and Vygotsky's Zone of Proximal Development underline its effectiveness through positive reinforcement and adaptive challenges. Challenges involve the risk of overemphasizing rewards, superficial learning, and high resource demands. Successful implementation necessitates clear objectives, suitable complexity, teamwork, and continuous progress tracking. Future research should explore long-term impacts, curricular integration, personalization, accessibility, and adaptation to various socio-cultural contexts. Gamification presents a promising method for transforming ELT, offering engaging and effective learning experiences tailored to individual needs. This paper will expand on all of this by (in this order) exploring what gamification is, exploring its origins, defining the purpose, highlighting the benefits, exploring the two key psychological principles, specifying guidelines, providing a clear example, acknowledging drawbacks, and looking ahead to the future of this fascination approach to language teaching and learning.

KEYWORDS: gamification, learner engagement, personalization, motivation, skill development, positive reinforcement

I. What is it?

Gamification in English language teaching refers to the integration of game elements and principles into the learning process to make it more engaging, motivating, and interactive (Caponetto, Earp, & Ott, 2004). It leverages the inherent appeal of games to capture students' attention, encourage participation, and promote learning. More specifically, gamification taps into the natural human inclination for competition, achievement, cooperation and collaboration, and (instant) reward(s), which can easily motivate students to actively participate in the learning process (Cheong & Cheong, 2014). Additionally, games typically have clear, specific objectives, goals, and outcomes. Furthermore, games often have built-in mechanisms for tracking learning progress. They also provide instant feedback in an automated way or via peer evaluation.

Other benefits include adaptability and flexibility, personalization, variety, authenticity (i.e. real-world application and scenarios), long-term engagement and consistency, and cultural awareness, which all help keep language learning experiences dynamic, engaging, motivating, and memorable (Csikszentmihalyi, 1990). Gamification can also leverage digital platforms, which can be especially effective in engaging tech-savvy learners, to include the use of mobile apps, online platforms, and interactive software. Moreover, it can be a source of ongoing feedback and assessment of student performance that teachers can use to identify areas where students may need additional support and tailor their instruction accordingly. On top of that, games often require repeated engagement with content, which can aid in retention and recall of language skills. Finally, and perhaps most importantly, gamification adds an element of fun and enjoyment to the learning process that students crave.

II. When did it start?

Gamification emerged as a pedagogical approach in the 1980s and 1990s. Early on, it was comprised as board or card games designed to reinforce vocabulary and/or grammar, as well as Computer-Assisted Language Learning (CALL) that focused on simple games and quizzes. With the rise of digital technology from this point, language teachers began to explore the potential of video games and simulations for language learning, which offered interactive and immersive environments where learners could practice by using language, thinking

critically, and harnessing problem-solving skills in positive, inclusive, and comfortable learning environments (Gee, 2003; Gee, 2007; Plass, Homer, &Kinzer, 2015). Then, in the 2000s, there was an emergence of serious games that were designed with explicit educational goals in mind, to include language skills at a deeper level and cultural understanding (Gee, 2008). Building on that in the 2010s, online language learning platforms began incorporating gamification elements into their programs with features like points systems, badges, leaderboards, and progress tracking to make the learning experience more engaging (Deterding et al., 2011). As gamification gained popularity, researchers started conducting studies to assess its effectiveness in language teaching. Specifically, they explored the positive impacts of gamified elements on motivation, retention, and learning outcomes (Kapp, 2012). Needless to say, the proliferation of smartphones and mobile apps provided a new platform for gamified language learning. Apps like Duolingo, Memrise, and Rosetta Stone incorporated gamelike elements to motivate users to practice and learn languages. More recently, advances in virtual and augmented reality have opened up new possibilities for immersive language learning experiences as they can create realistic environments for learners to practice language skills(Hunicke&Zubek, 2004). To boot, modern gamification tools allow for the customization of learning experiences based on individual learner preferences, proficiency levels, and learning styles (Hwang, et al., 2012). AI-driven language learning platforms can also adapt content and challenges to the learner's progress, providing personalized and responsive experiences. In short, gamification in language teaching has had a global impact, making language learning more accessible to people around the world, continues to evolve with ongoing research and innovations in game design, technology integration, and pedagogical approaches, and clearly reflects the ongoing efforts to leverage technology and pedagogy to create engaging and effective learning experiences for language learners (Hamari, Koivisto, & Sarsa, 2014).

III. What is the purpose?

The purpose of gamification in English Language Teaching is to leverage game elements and principles in educational contexts to enhance the learning experience and achieve specific educational objectives. These include increased motivation via challenges, competition, and interactive activities, particularly as this heightened engagement helps students stay focused and excited throughout the enjoyable learning process (Barab et al., 2005). Moreover, game-like features, such as points, badges, and rewards, tap into students' intrinsic motivation, making the learning experience more enjoyable and encouraging them to actively participate in language learning activities (Habgood&Ainsworh, 2011). To add to this, there is an enhanced learning experience as gamification promotes interactive learning experiences where students can actively participate, experiment, and apply language skills in a dynamic and immersive environment (Hamari, Koivisto, &Sarsa, 2014). Furthermore, games often provide instant feedback, allowing learners to correct their mistakes and reinforce correct language usage in real-time, facilitating a more effective learning process. Skill development is another important area, especially in terms of language acquisition. In other words, gamification provides opportunities for learners to practice and reinforce language skills, to include vocabulary, grammar, pronunciation, and communication skills, in a playful and enjoyable manner. Games also often require problemsolving and critical thinking skills, fostering intellectual development and encouraging students to think analytically and strategically when using language. Additionally, games also help promote cooperation, collaboration, and meaningful communication, with many involving collaborative elements, encouraging students to work together, share knowledge, and communicate in the target language, which mirrors real-world language use scenarios. And don't forget teamwork as multiplayer or team-based gamification activities help learners develop effective interpersonal communication skills. Finally, gamification helps with personalized learning paths where students can progress at their own pace and focus on areas that need improvement. This adaptability caters to individual learning styles and preferences and empowers learners by giving them choices and control over their learning direction, fostering a sense of autonomy and responsibility for their own language learning journey. In short, the purpose of gamification in ELT is to transform the learning environment by leveraging game elements and principles to motivate, engage, and empower students, ultimately enhancing their language acquisition and overall learning experience (Lee & Hammer, 2011).

IV. What are the benefits?

Gamification in ELT offers a range of benefits that contribute to a more engagingand effective language learning experience (Arnab et al., 2005). One of the most important is increased motivation. Gamification taps into learners' intrinsic motivation by making language learning more enjoyable and rewarding, particularly as it provides a sense of achievement and progress, which encourages learners to actively participate (Dörnyei & Ushioda, 2011; Reinders & Wattana, 2014). To add to this, gamification introduces elements of friendly competition and collaboration, motivating learners to strive for improvement while fostering a sense of community within the language learning environment (Seaborn & Fels, 2015). Enhanced engagement is also critical. Games and gamified activities create interactive and dynamic learning experiences

wherein learners actively participate in challenges, quests, or simulations, which can enhance interest and focus during language learning. Incorporating storytelling and narrative structures in gamification also capture learners' interest and imagination, especially as a compelling storyline can make language learning more meaningful and relatable, promoting engagement throughout the learning journey. Furthermore, gamification helps create personalized learning paths based on individual progress as learners can choose activities, quests, or levels that align with their current language proficiency, ensuring that they are appropriately challenged at their own pace. Moreover, gamification empowers learners with autonomy and decision-making, enabling them to make choices about their learning paths. This sense of control enhances motivation and a sense of ownership over the learning process. Additionally, skill development can't be denied, as gamification provides opportunities for targeted practice of language skills such as vocabulary, grammar, listening, and speaking, giving learners an opportunity to reinforce their language abilities in a playful and interactive manner. Many gamified activities also require learners to think critically, solve problems, and make decisions, which help language learners navigate real-world language use situations. In addition, gamification platforms often provide immediate feedback on learners' actions, which allows learners to correct mistakes, reinforcing correct language usage and facilitating quicker learning. Learners can also track their progress through various levels, quests, or achievements. This feature helps them understand their strengths and weaknesses, setting clear goals for improvement. Social interaction is another important aspect. Multiplayer games, team challenges, and collaborative quests create a supportive learning community where learners can communicate in the target language. Learners can also benefit from peer-to-peer learning experiences within the gamified environment. As for long-term engagement, gamification can sustain learners' interest and commitment to language learning over the long term as regular updates, new challenges, and a variety of game elements contribute to a dynamic and evolving learning environment. Finally, gamification promotes a culture of continuous learning, as learners are motivated to explore new content, master more advanced levels, and consistently improve their language skills.

V.Are there any key psychological principles that affect language learning?

B.F. Skinner's operant conditioning principles have a significant impact on gamification. Operant conditioning involves the use of rewards and punishments to shape behavior, and this concept is often employed in gamification strategies to influence and reinforce language learning (Skinner, 1974). This involves positive and negative reinforcement, punishment avoidance, schedules of reinforcement, behavior shaping, and selfpacing and autonomy. There is positive reinforcement through reward systems, which encourage learners to engage in desired behaviors, such as completing exercises, participating actively, or achieving language proficiency milestones. Towards this end, Skinner emphasized the importance of immediate feedback to reinforce behavior, which gamification does by allowing learners to understand the consequences of their actions in real-time (Skinner, 1953). Reversely, negative reinforcement involves removing aversive stimuli to increase the likelihood of a behavior occurring (Skinner, 1938). For example, unlocking a new level could remove a difficult task, making the learning process more enjoyable. As for punishment avoidance, Skinner's operant conditioning suggests that learners are more likely to engage in desired behaviors if they receive corrective feedback rather than punitive measures. For this reason, gamification in ELT emphasizes constructive feedback that guides learners toward the correct language usage, avoiding a punitive approach that could discourage participation. Skinner also introduced the concept of variable reinforcement, where rewards are given inconsistently (Skinner, 1948). Gamification in ELT often uses this principle by introducing surprise rewards, unpredictable bonus challenges, or random incentives, and this unpredictability can heighten learner engagement and motivation. Additionally, Skinner's operant conditioning suggests that complex behaviors can be shaped through gradual steps (Skinner, 1957). Gamification in ELT often breaks down language learning into smaller, achievable tasks or levels (i.e. as learners successfully complete each step, they are progressively guided toward more complex language skills and proficiency). Finally, Skinner's ideas on self-monitoring align with the autonomy and self-pacing aspects of gamification as learners have the opportunity to monitor their own progress, set personal goals, and make choices in a gamified environment, which often enhances motivation and engagement.

Vygotsky's Zone of Proximal Development (ZPD), or the gap between what a learner can do independently and what they can achieve with the support of a more knowledgeable person or capable other, has also had a significant impact on gamification in ELT (Vygotsky, 1978). One of the most important ways is via scaffolding, especially as gamification allows for the gradual increase of difficulty levels as learners progress (i.e. they receive support and guidance in the form of hints, tips, and additional resource) (Chaiklin, 2003). Moreover, games can dynamically adjust the difficulty based on learners' performance, ensuring that the challenges are within their ZPD. This adaptive nature helps maintain an optimal level of challenge, which can help prevent frustration or boredom. In addition to scaffolding, collaboration and peer interaction is critically important. After all, Vygotsky emphasized the role of social interaction in learning (Wertsch, 1985). Fittingly, gamification often incorporates collaborative elements, encouraging learners to work together to solve problems,

share knowledge, and support each other, which mirrors the social interactions that Vygotsky considered crucial for cognitive development (Moll, 1990). Gamification can also facilitate peer teaching and learning within the ZPD. In other words, learners can collaborate on quests, missions, or challenges, with more knowledgeable peers who help those who are less proficient in the language. The ZPD can also be a learning path (i.e. gamification allows for personalized learning paths based on individual progress – meaning, learners can move through different levels or quests at their own pace, ensuring that they are always operating within their ZPD), to include providing target feedback that helps learners understand their mistakes and guides them toward correct solutions. Ultimately, all of this eventually or hopefully leads to ownership of learning as gamification often provides learners with choices and autonomy in decision-making, allowing them to select quests, missions, or activities. Moreover, gamification can facilitate the gradual release of responsibility from the teacher or the game to the learner. As learners become more proficient, they can take on more challenging tasks independently, reflecting Vygotsky's concept of internalization of knowledge (Tharp &Gallimoew, 1988).

VI.What are the guidelines?

Implementing gamification in English language teaching involves several key steps and considerations. From the get-go, it's vital to set specific language learning goals and objectives for each activity, which clearly ensures that the (e.g. vocabulary, grammar, role-play, storytelling, etc.) game aligns with the curriculum and targets the desired linguistic skills (Kapp, 2012). Once this is established, it's critical ensure that the complexity of the game matches the proficiency level and capability of the learners. Prior to playing the game, explain the rules and objectives to the students, to include making sure that they understand how to participate, what is expected of them, and what the outcomes might be (e.g. points, rewards, prizes, etc.). As playing games is clearly not a solo endeavor, it's important to foster positive opportunities for teamwork and collaboration (i.e. peer support). Providing instant feedback on students' performance within the game is also crucial, which helps reinforce correct language use and allows students to address mistakes in real-time (Kersting & Ge, 2014). Additionally, it's important to implement a system for tracking and recording students' progress, which can be done through digital tools and online platforms and applications that can record scores, completion rates, or other relevant metrics (e.g. Kahoot!, Quizlet, Duolingo, Wordwall, Minecraft - Education Edition, Wheel of Names, Classcraft, Flippity, GooseChase, Epic!, Seesaw, etc.). Another major component is ensuring the game strikes a balance between learning and play, especially as the game should be fun yet should also be designed to achieve specific educational outcomes. While certainly important to do after the game ends, it's important to also give students opportunities to reflect on what they've learned during game, which enhance the transfer of knowledge from the game to real-world language use (LI, 2010). After the game is over, it's essential to evaluate the effectiveness of the game by assessing students' language proficiency before and after the implementation via a combination of formative and summative assessments (Attail&Arieli-Attali, 2015).Gathering feedback from students about their experience will also help with improvements for future implementations and evolving students' wants and needs. On a broader scope, training teachers on how to effectively use gamification in the classroom via resources, workshops, and/or professional development can help create engaging and effective learning environments.

VII. Is there an example with clear language learning benefits?

A terrific example of gamification is *Mafia*, also known as *Werewolf*, which is a Russian social deduction game created by Dimitry Davidoff in 1986 (Harris, 2012). The game depicts a struggle between two groups: the villagers, who lack knowledge, and the mafiosi, who are a knowledgeable minority. Each player is surreptitiously assigned a role associated with one of these teams at the beginning of the game. The game is divided into two alternating phases: the night phase, in which players with the ability to kill other players discreetly, and the day phase, in which players who are still alive discuss and decide who should be eliminated. The game goes on until a faction meets its win-condition, which is often reached by the minority by gaining numerical parity with the village and destroying any competing evil organizations, and by the village by eliminating the evil minority (Ormerod, 2009). Many examples and plenty of support can be found online.

As for potential language learning benefits for higher level ELT students, there are many:

- <u>Listening</u>: As players need to actively listen to others during discussions to gather information, they're able to improve their listening skills by deciphering spoken English in real-time (to include understanding accents, varied speech patterns, and different communication styles).
- <u>Speaking</u>: As the game requires participants to engage in extensive oral communication during both the day and night phases, students are able to practice expressing their thoughts, suspicions, and defenses in English, which helps improve their pronunciation, fluency, and overall speaking abilities.
- <u>Vocabulary</u>: As the game introduces specific vocabulary related to roles, actions, and gameplay, students can learn and reinforce vocabulary in a context-rich environment, particularly when using their lexis repertoire for deception, strategy, and investigation.

- <u>Critical thinking and problem-solving</u>: As the game involves strategic decision-making, deduction, and problem-solving, students can enhance their critical thinking skills as they analyze information, make decisions, and respond to challenges within the game's context.
- <u>Negotiation and persuasion</u>: As players engage in debates, negotiate alliances, and persuade others during discussions, students have the opportunity to practice the art of persuasion in English and learn to articulate their viewpoints convincingly and negotiate effectively with other players.
- Expressing doubt and uncertainty: As students express doubt or skepticism when discussing suspicions, they learn to use language structures for expressing uncertainty, reinforcing their ability to navigate conversations in situations of doubt.
- <u>Culture</u>: Thematic variations of the game may introduce cultural contexts, idiomatic expressions, and colloquial language, which will help students gain exposure to cultural nuances embedded in language, improving their understanding of idioms and informal language commonly used in social deduction games.
- <u>Teamwork and collaboration</u>: In certain game variations, players collaborate as a team to achieve common goals, which can provide students with practice working collaboratively, contributing ideas, and coordinating with others in English (i.e. it mirrors real-world teamwork scenarios).
- Adaptability and flexibility: As players must adapt their strategies based on evolving information and alliances, students learn to be adaptable and flexible in their language use (i.e. they adjust their communication style to suit different game situations, improving overall language flexibility).
- <u>Post-Game reflection</u>: A post-game discussion allows participants to reflect on strategies, decisions, and language use, which affords students the opportunity to receive constructive feedback, fostering self-awareness and improvement in language skills.
- <u>Active learning experience</u>: As the game provides an immersive and active learning experience, students are engaged in a dynamic, enjoyable, and interactive language learning environment, which can enhance motivation and overall language acquisition.
- <u>Language challenges and specific objectives</u>: The game can be adapted with specific language challenges or objectives, which can help with targeting particular language areas for improvement, such as grammar structures or vocabulary use, fostering targeted language development.

VIII. Are there any drawbacks?

While gamification in English language teaching offers numerous benefits, it's important to be aware of potential drawbacks as well. Be careful about the overemphasis on rewards as students may become overly focused on earning them rather than on the actual learning content, which can lead to surface-level engagement without deep comprehension. There is also the potential for distraction and loss of sight of learning objectives depending on the game's design and platform. Moreover, some gamified platforms may not adequately cater to individual learning styles and preferences (i.e. it's not a one-size-fits-all approach). Lack or loss of interest, engagement, and motivation can surface at any point, which necessitates constant observation, reflection, and planning (Dichev&Dicheva, 2017). There is also the risk of superficial learning, wherein students may focus on memorizing facts or completing tasks to earn points rather than gaining a deeper understanding of the language (Hanus & Fox, 2015). Sadly, yet realistically, there is the potential for cheating for the wrong reasons – that is, students may find ways to exploit the game's mechanics to earn rewards without actually engaging in meaningful learning activities. On top of all this, games require a significant amount of time, effort, energy, and resources on an ongoing basis that can result in resource intensiveness (Biro, 2013). There is also the fact that not all students may have equal access to the necessary technology or resources for certain gamification platforms, potentially creating disparities in learning opportunities (Kim et al., 2018). Finally, some teachers and institutions may be resistant to adopting gamification due to a preference for traditional teaching methods or a lack of familiarity with gamified approaches, especially if they feel that students may struggle to apply the language skills they learn in the game to real-world contexts, and if the game does not effectively bridge the gap between virtual and practical scenarios (Landers & Landers, 2014).

IX. What does the future look like?

Future research in gamification for English language teaching is likely to focus on refining current practices and exploring new avenues. Additionally, several challenges need to be addressed to ensure the continued effectiveness and sustainability of gamification in language education (Koivisto & Hamari, 2019). To begin with, future research should conduct rigorous studies in an effort to assess the long-term impact of gamification on language learning outcomes, to include measuring proficiency gains over extended periods and understanding how gamification affects retention. Research could also delve into how gamified elements can be seamlessly integrated into established language curricula, ensuring alignment with learning objectives and assessment methods. Moreover, investigating how gamification can be further personalized to cater to individual

learner preferences, proficiency levels, and learning styles is needed, which could involve the development of more sophisticated adaptive learning technologies. Research should also, as noted above, focus on designing gamified platforms that are accessible to diverse student populations, including those with disabilities or limited access to technology (Petko & Antosz, 2020). Then there are the neurocognitive aspects that need to be carefully considered (i.e. understanding the cognitive processes involved in gamified language learning, including attention, memory, and problem-solving, and how these processes contribute to language acquisition). Conducting comparative studies to assess the relative effectiveness of different gamification approaches and platforms in language learning contexts is also vital. Finally, future research could investigate how gamification can be adapted to suit the socio-cultural backgrounds and contexts of diverse learner populations, considering factors such as cultural norms and linguistic diversity (Steinkuehler & Duncan, 2008).

X.Conclusion

In conclusion, the integration of gamification in ELT has emerged as a dynamic and promising approach to transform traditional learning environments. The marriage of game elements and language education principles has yielded a range of positive outcomes, which has influenced various facets of the teaching and learning process. Gamification addresses the perennial challenge of learner motivation by leveraging intrinsic and extrinsic motivational factors. Through the implementation of game elements educators can help create an engaging atmosphere that stimulates learners' natural curiosity and desire for achievement. The infusion of game-like structures not only captures attention but also sustains interest over the long term, which fosters a positive and participatory learning experience. Moreover, the alignment of gamification with psychological principles, including Skinner's operant conditioning and Vygotsky's ZPD, enhances its impact on language learning. Positive reinforcement mechanisms and the gradual progression of difficulty levels mirror operant conditioning, while collaborative and scaffolded activities cater to learners within their ZPD, promoting a supportive and interactive learning environment.

The benefits of gamification in ELT extend beyond motivation to encompass skill development, personalized learning paths, and the cultivation of critical thinking. Learners engage in language acquisition through interactive, problem-solving scenarios, and the adaptability of gamification platforms allows for tailored learning experiences that cater to individual needs and preferences.

However, challenges and considerations, such as the risk of overemphasizing rewards and the need for inclusivity, underscore the importance of thoughtful implementation. Educators must strike a balance between the playful elements of gamification and the academic rigor inherent in language education, ensuring that the primary focus remains on meaningful language acquisition.

Looking ahead, the future of gamification in ELT holds exciting possibilities. As technology continues to advance, the integration of emerging technologies and the exploration of new research directions will further refine and expand gamified language learning experiences. The continued collaboration between educators, game designers, and researchers promises to unlock innovative solutions that enhance language learning outcomes and inspire a new era of interactive, engaging, and effective ELT practices. Gamification stands as a beacon, guiding the way toward a future where language education is not just instructive but an immersive adventure that empowers learners on their linguistic journey.

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