

Examining the Impact of Gamification on English Language Instruction: A Literature Review

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Abstract—This literature review explores the influence of gamification on the teaching of English language, providing insights into its effectiveness, difficulties, and potential future developments. The review explores the possibilities of using gamified techniques in language acquisition by analyzing a wide range of scholarly papers, empirical investigations, and theoretical frameworks. The study emphasizes the advantages of gamification in improving student engagement, motivation, and competency. It highlights how gamification promotes dynamic and interactive learning environments. Nevertheless, despite the potential benefits of gamification, there are significant obstacles that need to be addressed, including the integration of technology and alignment with educational principles. These issues require considerable thought and well-informed planning. The review emphasizes the need for more research to investigate the many intricacies of gamified language learning settings and facilitate their ongoing development and improvement. In summary, the review supports the idea of incorporating gamification into English language training as a strategic approach, which will enable learners to succeed in a constantly changing linguistic environment.

Keywords: Gamification, Second Language Learning, Student Engagement

I. Introduction

Gamification refers to the incorporation of game design features into non-game situations. However, it did not gain significant popularity until the latter part of 2010 (Deterding et al., 2011). According to Werbach (2014), gamification is the act of transforming activities that are not games into ones that resemble games. Gamification refers to the utilization of game design components, such as points, leaderboards, and badges, in a non-game setting to create a learning experience that resembles playing a game (Landers et al., 2017). Kapp (2012) posited that gamification involves more than just incorporating game mechanics and aspects into learning; it encompasses the concept of enhancing learners' engagement, fostering interactive learning environments, and promoting students' autonomy in the learning process. Badges, awards, cumulative scores, and competition scores serve as tangible motivators for students and encourage desired behaviors in the field of education (Shortt et al., 2021). The design of a gamified learning environment should integrate three separate concepts: dynamics, mechanics, and components (Bicen and Kocakoyun, 2018). Game dynamics encompass several elements such as status, rewards, self-expression, competitiveness under clearly defined and enforced rules, and achievement, among others. Game mechanics encompass several elements such as the level-system, narrative background, difficulty, achievements, leaderboards, and similar components (Bicen and Kocakoyun, 2018). The game incorporates several components such as avatars for self-representation, feedback, points, trophies, badges, a progress meter, virtual gifts, and similar features (Deterding et al., 2011). The purpose of including these aspects is to evoke users' emotions of interest, competition, curiosity, and frustration, persuade them, and maybe modify their actions, in order to enhance the learning process through a gamification application. The implementation of gamification on portable mobile devices is straightforward and widely used in the digital environment (Su et al., 2021). Consequently, this study specifically examines the application of digital gamification.

In recent years, there has been a rise in the use of digital gamification in EFL/ESL teaching and learning (Dehghanzadeh et al., 2019). English as a foreign language (EFL) refers to the academic pursuit of studying English in a nation where it is not the primary language. English as a second language (ESL), also known as English as an extra language, refers to the learning of English by those who are not native English



speakers in a nation where English is the primary language (Barber et al., 2009). This research combines the two labels, as both EFL and ESL are used to describe individuals who are learning English as a second language and whose native language is not English. Improving the English hearing, speaking, reading, and writing abilities of non-native English speakers has become a significant area of research due to the obstacles they experience. This issue has been explored by Liu and Chu (2010), Dehghanzadeh et al. (2019), and Zohud (2019).

Numerous teaching methodologies have been employed in the realm of EFL/ESL education over the course of history. Starting from the 1970s, the term “communicative” started being used in the context of teaching English as a foreign or second language. This led to the development of two teaching methodologies known as communicative language teaching and task-based language teaching (Howatt and Smith, 2014). Communicative language teaching (CLT) is a language learning strategy that focuses on promoting interaction and conversation during the language study process (Savignon, 1991). Nevertheless, several academics have contended that CLT has not achieved its desired objectives in numerous EFL environments. This is mostly due to the lack of sufficient possibilities for students to use English beyond the confines of the classroom (Humphries and Burns, 2015; Lee and Wallace, 2018). Task-based language training, a subtype of CLT, emphasizes the utilization of genuine language to accomplish significant activities, such as conducting interviews, seeing doctors, or organizing trips in the target language (Skehan, 2003). Other frequently used teaching methods in EFL/ESL instruction include flipped learning, which seeks to empower teachers and students to reverse the usual classroom dynamic: According to Hockly and Dudeney (2018), students have the ability to acquire knowledge from lectures in the comfort of their own homes, allowing them to utilize their time in school for completing homework tasks. Several studies have demonstrated the effectiveness of flipped learning in meeting the instructional objectives of EFL classes (Chen Hsieh et al., 2017). In particular, EFL learners in the flipped classroom got significantly higher average scores compared to those in the traditional classroom setting (Lee and Wallace, 2018).

In the modern era, advancements in technology and education have led to a wider range of learning environments, offering language learners new opportunities. These include social media platforms, gaming platforms, collaborative projects, telecollaborative projects, and various mashups (Kessler, 2018, p. 208). Gaming is a rapidly growing field (Kessler, 2018). Gamification is a modern approach in education that seeks to make learning more appealing to students by creating a fun and entertaining learning environment. It is believed to enhance student engagement and motivation in the learning process (Deterding et al., 2011; Lee and Hammer, 2011; Kapp, 2012; Bicen and Kocakoyun, 2018). Within educational settings that incorporate gamification, students often experience a heightened level of involvement and pleasure, as well as prompt feedback. They also have the opportunity to succeed by conquering challenges, resulting in a feeling of fulfillment (Bicen and Kocakoyun, 2018).

Due to the growing popularity of gamification in language learning, various reviews have been published on the topic of gamification in language teaching and learning (Dehghanzadeh et al., 2019; Dehghanzadeh and Dehghanzadeh, 2020; Shortt et al., 2021; Su et al., 2021). In their study, Su et al. (2021) conducted a comparison of 64 rigorous investigations conducted between January 2000 and August 2020. These studies focused on assessing the effectiveness of mobile game-based language learning (MGBLL) and non-mobile game-based language learning (NMGBLL). This study discovered that gamification is extensively used in language learning, with immersive games and simulation games being particularly popular. This may be due to their incorporation of various game elements such as goals, continuous feedback, and control, which effectively sustain learners’ motivation, confidence, and curiosity. Furthermore, the study discovered that MGBLL research frequently included gamification, possibly due to the ease of implementing gamification on portable mobile devices. The game features that appeared most frequently were “goals or rules, sensory stimuli, and adaptive challenges” (Su et al., 2021, p. 16). Adaptive challenges refer to the ability of a well-designed game to adjust the difficulty of activities to meet the capacities of learners, ensuring that they are neither too simple nor too challenging. The predominant learning outcomes seen were the acquisition of vocabulary and the

favorable emotional states experienced by students. Shortt et al. (2021) conducted a systematic analysis of 35 publications published between 2012 and 2020. The research focused on the design, application, and pedagogies associated with the usage of Duolingo, a widely used gamification platform in Mobile-Assisted Language Learning apps. The study's results revealed a direct association between the utilization of Duolingo and foreign language proficiency, namely enhancing academic success in English, augmenting English vocabulary, refining listening abilities, and boosting English communication skills. Participants emphasized the interactive and gamified aspects of Duolingo's design. Certain gamification components, such as badges, streaks, points, and leaderboards, were seen positively. Nevertheless, as the initial excitement of using gamified presentation diminishes, it becomes apparent that the game-like features are insufficient to make up for the design choices that prioritize competition over cooperation, repetition and translation over meaningful feedback and context (Shortt et al., 2021, p. 22). Hence, rivalry and repetition are not crucial components in the design of gamified learning exercises. Instead, it is important to prioritize features such as teamwork, relevant feedback, and context.

This article examines existing empirical research on the use of gamification in EFL/ESL instruction. It specifically focuses on the current state of utilizing digital gamification for EFL/ESL learners, the advantages and disadvantages of incorporating gamification in EFL/ESL instruction, and the primary platforms and gamification elements employed in designing EFL/ESL learning activities. The findings offer a more comprehensive insight into the current utilization of gamification in EFL/ESL teaching within the past several years. This information will be valuable for scholars who wish to comprehend and assess the concept of gamification, as well as for practitioners who are interested in implementing gamification in both formal and informal educational settings.

II. Game Design Theoretical Background

The objective of including gamification design components differs significantly from game design. Gamification design features are utilized to promote participation in many settings, whereas game design is primarily focused on providing pure amusement. Marczewski (2014) clearly differentiates between game design and gamification design, as well as their respective characteristics. Initially, the primary foundation for game design often revolves around the fundamental concept of providing entertainment, whereas gamification is more focused on achieving a corporate aim. Furthermore, the establishment of metrics or game lines must occur at distinct stages of the design process.

The method of producing a gamified system differs from designing a game, however there is a vague relationship between game design and gamification design. However, the fundamentals of gamification are strongly based on the concepts of game design theory. This section presents a concise theoretical foundation on the issue, which is essential for comprehending the common qualities seen in most gamification design frameworks.

In the context of gaming, "game design" may be defined as the process of creating coherence and meaning within the elements of a game. This definition closely aligns with Schell's characterization (2008) of game design as "the process of determining the nature and characteristics of a game." Salen and Zimmerman (2004) established a collection of essential principles for game design that should be implemented in an iterative method.

- Gaining comprehension of design, systems, and interactivity, as well as player choice, action, and consequence.
- This includes an examination of the process of creating and breaking rules, the concept of complexity and emergence, the experience of playing games, the representation of games, and the social interaction within games.
- Additionally, it explores the strong relationship between the rules of a game and the enjoyment that playing the game brings, the meanings that games create, the ideologies that games embody, and the narratives that games convey.



According to Brathwaite and Schreiber (2009), it is important to enhance these concepts by considering how to integrate the various aspects of games after they have been discovered. From a chemical standpoint, game atoms are defined as “the smallest components of a game that can be separated and examined individually.” Thus, when considering games from an atomic perspective, the process of developing them as a compilation of individual atoms becomes more evident.

Reeves and Red (2013) propose ten essential elements for creating a successful game design. These include self-representations, three-dimensional environments, narrative, feedback, reputation ranks and levels, marketplaces and economies, competition under rules, teams, communication, and time pressure.

After condensing the game parts into game design principles, it is required to establish a consistent idea, procedures, and criteria to assemble them logically inside the framework’s specification. A framework is a tangible or abstract structure designed to provide support or direction for the development of anything that transforms the structure into a practical and valuable entity (as defined in the glossary). However, it is important to acknowledge that several authors, like Crawford (1984), have reached the conclusion that game design is an intricate task that cannot be simplified into a formal technique. Julius and Salo (2013) argue that it should be seen as an agile process that does not necessarily adhere to a particular design framework, although they do offer one.

The emergence of the MDA (Mechanics, Dynamics, and Aesthetics) framework in 2004 addressed the necessity for a formal and acknowledged proposal in game design contexts. This framework, developed by Hunicke et al., offers a structured method for comprehending games and aims to connect game design and development, game criticism, and technical game research. Based on this structure, games may be categorized into three components: rules, system, and enjoyment. These aspects are immediately converted into the subsequent design components, which must be explicitly described when creating a game utilizing the same sequence:

- Mechanics refer to the specific components of the game, focusing on how data is represented and the methods used.
- The dynamics refer to the real-time behavior of the mechanics that influence player inputs and the resulting outputs over a period of time.
- Aesthetics refers to the ideal emotional reactions that are produced in the player when they engage with the game system.

III. What is Gamification?

Gamification is a relatively recent idea that involves incorporating game aspects and design principles into non-game situations, as defined by Werbach and Hunter (2012). It relies on the achievements of the game industry, social media, and extensive studies on human psychology. Essentially, gamification may be applied to any activity, assignment, process, or theoretical environment.

The primary goals are around enhancing user engagement and motivation by integrating gaming features and techniques, such as leaderboards and fast feedback. This instills a feeling of empowerment and active involvement in users as they navigate through procedures and accomplish tasks. Furthermore, it is crucial to grasp the fundamental principles of the games while employing Gamification as a technique. Prior to considering the motivating features of this idea, it is essential to revisit the four components of the definition, namely: games, elements, design, and non-game situations.

3.1. Game elements

The game elements that create the regular patterns in game design are commonly referred to as game elements. Many contemporary games incorporate many aspects, sometimes referred to as components, such as points, badges, leaderboards, progress bars/progression charts, performance graphs, missions, levels, avatars,



social elements, and prizes. Each of these aspects has distinct objectives and may be easily customized to suit various labor, commercial, or educational settings. The table below has a concise explanation for each aspect.

Table. Game elements and definitions

Points	Numerical aggregation derived from specific activities
Badges	Visual depiction of achievements for usage as exhibited online
Leaderboards	How are players rated depending on success
Progress bars/Progression	Displays the status of a player.
Performance graph	Demonstrates player performance.
Quests	Some of the assignments that players have to complete in a game.
Levels	A segment or portion of the game.
Avatars	Visual illustration of a player or alter-ego
Social elements	Relationships with other users inside the game
Rewards/reward system	System for motivating players who complete a mission

Every game element included in Gamification inherently improves the teaching and learning process of L2. Nowadays, the majority of games that are known to the public have these components, but all of them adhere to a structured framework. Each game has three fundamental components: meta-centered actions, rewards, and development (Dickey, 2005). According to Smith Robbins (2011), all game activities are centered around a specific objective, which is to win by overcoming obstacles and other conditions in order to complete a quest. Furthermore, and contingent upon the circumstances, every game utilizes a mechanism to bestow incentives upon the player or a reward system. The three main categories are leaders, prizes or accolades, and achievements.

The leaders are the people who are categorized according to their achievements in the game. In athletics, a similar notion is employed, sometimes with a leaderboard, which may act as a powerful motivation. This category is commonly utilized in competitive endeavors, but is frequently adopted by the corporate sphere to inspire collaboration. An alternative incentive scheme involves the provision of rewards or accolades. This form of incentive is found in games where the player may unlock further activities or levels upon successfully completing the preceding ones. Prizes and incentives encourage more dedication and involvement from the player (Glover, Campbell, Latig, Norris, Toner & Tse, 2012), and this is a factor that remains important in second language (L2) learning. Ultimately, accomplishments are visually displayed symbols, sometimes referred to as badges, that are visible to the public on a player's online profile. They are seen as the amalgamation or fusion of the aforementioned reward types. The proliferation and adoption of badges, each imbued with distinct significance, has experienced significant growth, mostly attributed to the advancement of game consoles and internet gaming. Acceptance or assimilation is the source of motivation for second language learners. Receiving acknowledgment will serve as a catalyst for their motivation to advance to a higher level or attain an extra reward. Progression is the ultimate fundamental component integrated into games. Dickey (2005) emphasizes that growth is a crucial component in games. Primarily, it is highly regarded for its ability to captivate and inspire the player. The primary goal is to keep the gamer informed about their degree of advancement. Furthermore, it provides the player with essential information on the fulfilled objectives and the chores required to successfully finish the level. Additionally, it symbolizes the progression of the player, which may consist of a sequence of little obstacles integrated into a major obstacle (Werbach and Hunter, 2012). In the L2 classroom, the instructor fosters growth by methodically encouraging healthy rivalry and displaying the students' advancement to the class. The second language learner is capable of perceiving their own advancement and develops a willingness to take risks, driven by their want to grow further.

3.2. Game design and non-game contexts

Game design is another element included in the concept of Gamification as stated by Werbach and Hunter (2012). Games are not only components; they are intentionally and artistically designed as a holistic framework to provide enjoyment. However, they must also possess creativity and a clear goal. It is necessary for



them to exhibit individuality and avoid becoming just replicas of others. In addition, the presence of uniqueness and character is vital in order to enhance the player's experience with depth and richness. Effective game design is characterized by equilibrium and elicits a comprehensive assessment of the total gaming experience from the player. As an illustration: Was it difficult? Was it difficult? Was it simple? Furthermore, game design include an experience element that entails using both established and innovative methods centered around exploration and discovery. These techniques may be utilized in Gamification to inspire and engage the player.

According to Werbach and Hunter (2012), Gamification is created with a focus on a non-game context perspective. This implies that the aim objectives will not be only centered around having fun or enjoyment; rather, both elements will be integral to the whole experience. The incorporation of non-game scenarios has been crucial in the global implementation of staff development and training programs by several firms. Pappas (2013) asserts that employing game-like procedures in training for the work environment enhances engagement, satisfaction, and practicality compared to alternative methods.

3.3. Gamification in Education and Second Language Learning

In the 21st century, incorporating technology into education has become indispensable for enhancing the teaching and learning process. Over the years, we have witnessed significant developments and undergone transitions that have propelled computer hardware, software, and web-based technologies towards instructional advancements. Primarily, we have witnessed significant transformations in the educational pursuits and instructional methods across several generations. In the present day, the majority of students are considered digital natives, meaning they have grown up with technology and have a distinct approach to learning and processing information (Prensky, 2001). The millennial generation, also known as Generation Y, is characterized by their inclination to share knowledge and their familiarity with activities such as blogging, gaming, and social networking. They have chosen to communicate using text messages rather than emails and have developed a system of communication that relies heavily on acronyms. They prioritize web-based activities and are unafraid to articulate or adopt a personal or collective perspective. Many instructors, particularly L2 teachers, are using various teaching methodologies that use Information and Communication Technologies (ICTs), Distributed Learning, Mobile Learning resources, and Game-Based Learning to cater to this sort of learner. Furthermore, these educators possess knowledge of emerging trends in educational technology and are incorporating Gamification into their instructional practices.

The study discusses the Deloitte executive company as an example of professional development for educators. They created the Deloitte Leadership Academy and introduced instructional Gamification. They introduced gaming components such as badges to reward individuals who successfully completed the curriculum-based assignments. As a component of the incentive system, learners had the ability to display their badges on their LinkedIn profile, making them visible to a global audience via the Internet. Gamification has been extensively studied, debated, and implemented in the field of second language (L2) learning and second language acquisition (SLA) for several years. The goal of incorporating Gamification into education is to provide a more engaging and efficient learning experience for students. As a result of this element, the L2 learner is drawn to having this experience. The premise of this statement is that L2 education has been deeply involved with technological advancements for a significant period of time. To induce a certain behavior, learners must be motivated, and Gamification provides an opportunity for L2 learners to improve their language learning experience while also developing the ability to overcome any task or obstacle presented in the class, unit, or subject. Furthermore, Gamification provides learners with the chance to engage with each other, as is seen in a social game. Based on these criteria, the integration of gamification and several common approaches and techniques in L2 education is taking place. Furthermore, individuals tend to instinctively react to emotions such as enjoyment, empathy, and irritation, as well as adhere to social norms like taking turns, when they experience any type of social presence (Fogg, 2002).

An essential element of educational Gamification is the incorporation of educational goals. The student will perceive these instructional objectives as tasks to be achieved in order to progress from one level to the



next. Ultimately, the challenge and progression from one level to another become integral components of the learning outcome. This offers options for L2 instructors to efficiently strategize for the language learning process and proficiency levels they are dealing with, and to reconsider their methods by seeing the parallels between games and learning. By using Gamification, the L2 learner might view themselves as a player striving to successfully finish a level. In the psycho-pedagogical context, according to Ames (1990) and Pintrich (2003), the learner progresses after successfully finishing a unit, module, or task. The assessment of language learning is done through a range of game-like experiences. Integrating educational gamification into the L2 learning process allows the teacher to design lessons using a gamified shared vision. This includes dedicating more time to learning activities and increasing the level of difficulty, specifically focusing on improving fluency in the language. By adhering to this approach, learners experience increased levels of engagement and motivation. Furthermore, motivation is enhanced in a gamified instructional setting when the learner's achievement is publicly acknowledged through a reward system that offers rewards or awards. According to Buckingham (2014), when badges are used in Gamification for L2 learning, they serve as a motivational tool and can also function as a form of formative assessment. Additionally, they help to establish higher standards in the classroom by setting challenges for learners as they strive to achieve fluency in L2. An example of an analog reward system is when a teacher publicly acknowledges a student's achievement by presenting them with a golden star. Glover, Campbell, Latig, Norris, Toner, and Tse (2012) argue that including badges or a reward-based gamified system might effectively engage students in competitive activities, such as drafting a research paper. However, it should be noted that these incentives should not be used as a substitute for exempting students from tests. Should this situation arise, it might potentially have a negative impact on the actual process of acquiring knowledge (Meece, Anderman, Anderman 2006).

IV. Conclusion

To summarize, this literature analysis has offered significant insights about the influence of gamification on the teaching of the English language. Through an analysis of many academic publications, practical research, and theoretical frameworks, we have developed a more comprehensive comprehension of how gamification principles are utilized in language learning settings and their impact on learner engagement, motivation, and learning achievements.

The review emphasized the potential advantages of using gamification into English language training, such as heightened student motivation, heightened engagement, and higher language competency. Gamified techniques provide novel and dynamic learning experiences that accommodate various learner preferences and styles, creating a favorable environment for language acquisition.

Nevertheless, it is crucial to recognize the difficulties and constraints linked to the implementation of gamification in language learning. Creating impactful gamified experiences necessitates meticulous deliberation of learners' requirements, cultural contexts, and pedagogical goals. Furthermore, the successful application of gamification requires the presence of suitable technological infrastructure and instructional assistance to guarantee its efficacy and long-term viability.

In order to have a deeper understanding of the lasting effects of gamification on language proficiency and communicative competence, it is necessary to do more study. Furthermore, it is necessary to explore the most effective design concepts and tactics for creating gamified language learning settings. By taking into account these factors and utilizing the benefits of gamification, educators may develop captivating and immersive English language learning experiences that enable learners to successfully accomplish their language learning objectives in the era of digital technology.

The information, moreover, given supports the conclusion that using Gamification in L2 learning has a beneficial impact on the learning experience. Simultaneously, it is necessary to approach learning interventions with prudence. Gamification enhances many personality traits for L2 learners. Furthermore, the learner



progresses from a state of introversion characterized by shyness to a more motivated state, driven by positive feedback and the utilization of game features. Introducing game elements in the L2 classroom improves the acquisition of writing, reading, and speaking skills, while also fostering cooperation and engagement among students. Gamification enables the educator to design significant experiences that shift from a mere focus on gaming to a mindset that embraces technology and constructivist learning. In order to attain success in implementing Gamification in L2 learning, it is crucial to ensure that the objectives and goals are in harmony and that there are established criteria for formal assessment.

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