

Using Gamification in Teaching and Learning Grammar

Shaghayegh Sargazi*

B.A. student of ELT, Farhangian University, Zahedan , Iran

Shiva Sargazi

P.H.D student of Medical science, Medical Sciences University , Zahedan , Iran

Abstract

Utilizing gamification in teaching and learning grammar has become increasingly popular as educators seek to engage students in a fun and interactive way. Gamification, with its elements of competition, rewards, and interactivity, has the ability to transform the traditional grammar lessons into immersive and captivating experiences. By leveraging game-like structures such as points, levels, and badges, educators can create a more dynamic and participatory learning environment that motivates students to actively engage with grammar content. Moreover, gamified activities can provide instant feedback, promote collaboration among peers, and spark a sense of achievement that boosts students' confidence and interest in learning grammar. By incorporating gamified activities into the curriculum, teachers can create an immersive learning environment that promotes active participation and retention of grammatical concepts. We examine the effectiveness of gamification in improving grammar skills, fostering collaboration among students, and promoting a growth mindset towards language learning. Through a comprehensive analysis of current research and case studies, this article aims to clarify the effect of gamification integration in teaching and learning English grammar. Ultimately, the findings provide valuable insights for educators and learners seeking to optimize the use of gamification in expanding their grammar proficiency.

Keywords: Gamification, Teaching, Learning, Grammar, Educational Technology, Motivation.

1.Introduction

Learning a second language is not a comfortable, pleasant task, and students usually experience difficulties. It needs to master writing, reading, speaking, and listening skills. According to Hayakawa et al. the most challenging complex terms are usually easier to forget when learning a new language. So, to learn a second language more efficiently, it is essential to connect the words to the real world. Besides, teaching a new language involve some cognitive activities and challenging tasks. For instance, collaboration is a crucial term for teaching language to create a relaxing atmosphere inside the class. since many students have a fair factor. Some tasks in language classes, like translating, are time-consuming in crowded classes and are problematic for the teacher. Through the use of game-based elements, teaching and learning turn into a more collaborative and enjoyable process. The purpose of implementing the gamification concept in education is to maximize learner's motivation and engagement. The main focus of gamification should be on the learner to make a desirable change in behavior[1].

Speaking and writing both follow the rules of grammar. To write phrases and paragraphs with clarity and good structure, proper grammar must be employed. Grammar instruction is crucial for students to master since it is necessary for them to acquire grammar before they can become proficient in reading, writing, speaking, or listening. By learning and understanding grammar, students' communication with one another will be more accurate. Ibrahim (2016) pointed out that language learners in one of the language systems that must be taught are grammar. There are two ways to teach grammar structures, deductive and inductive. The way of teaching deductive grammar is that the teacher teaches and explains new knowledge of grammar structures to students so that students can conclude the material that has been introduced. The way of teaching with inductive grammar is that the teacher explains the new structure of grammar and adds text so that students can take the meaning and understanding of grammar from the text[2].

Grammar has played an essential role in learning English. Grammar, the structural foundation, defines types of words, word groups, and rules to produce correct and meaningful sentences. However, English as a foreign language (EFL) learners in many Vietnamese schools appear to face a lot of problems with grammatical knowledge. They have common errors in many areas of English grammar as tenses and aspects, the copula be, adverb positions, and adjective phrases . Besides, there is a great difference between Vietnamese and English grammatical characteristics . Vietnamese grammar mainly includes word order and the usage of function words rather than bound morphemes. That can be a big obstacle for Vietnamese learners to master English grammar. Therefore, applying updated methods to help learners get more engaged in learning activities and improve their achievement has always been important to enhance the quality of teaching and learning grammar since students play an active role in their learning process[3].

Gamification of education is a strategy for increasing engagement by incorporating game elements into an educational environment. The goal is to generate levels of involvement equal to what games can usually produce. The main goals of gamification are to enhance certain abilities, introduce objectives that give learning a purpose, engage students, optimize learning, support behavior change, and socialize[4]. Recently, gamification has been applied in various areas of teaching and learning English because of its great benefits. It was used to motivate learners and enhance their engagement in learning[3].

1.1. Gamification

1.1.1. Definition

Gamification is defined as the use of game design elements in non-game contexts, yet it did not attract widespread adoption until the second half of 2010 . Werbach (2014) redefined gamification and considered it as the process of making non-game activities more game like. Gamification is also defined as the application of game design elements like points, leaderboards, and badges in a non-game context, to provide a game-like learning experience[5].

According to The Multimedia Game for Inclusion Project Gamification is “The use of machines and the feel of a game to inspire positive change in others awakens the same human instincts that drive people to compete in sports and other fun activities. It can also be defined as a process of using game mechanics, thinking and elements to nongame tasks to make them look like a game; such as using achievement badges or leaderboards to increase learners’ motivation and improve their learning[6].

In light of the definitions mentioned above, gamification can be operationally defined as “A pedagogical strategy in which English Language teacher applies the appropriate game elements to non- gaming and boring grammar content (structures and tasks) and make it sound like a game in order to motivate the primary pupils to learn grammar deeply and practice it with fun”.

1.1.2 Differences between gamification and game-based learning

It is commonly misunderstood that gamification is game based learning. On the contrary, there are subtle differences between both of them. Shah (2016) refers to the following two slight differences between gamification and game based learning[6].

a. Gamification is a game thinking for applying game elements to non- game contexts in a way that encourages learners’ motivation nevertheless, game based learning is based on an adopted ready-made game with the knowledge that learners can get from its content[6]. Gamification is defined as the application of game elements in non-game contexts. Some examples of game elements are levels of difficulty, point systems, badges, leaderboards, quests, social graphs, avatars, or certificates . Gamification has been highlighted to have benefits in enhancing engagement and solving problems . Gamification does not directly enhance learners’ knowledge and skills. Instead, the improvement of learners’ knowledge and skills can be the result of positive changes in learning behaviors, commitment, and engagement in learning activities[3].

b. Gamification helps the teacher monitor learners' progress and help the learners track their performance; however, game based learning just makes all learners interested in what they learn[6]. Game-based learning refers to the achievement of defined learning outcomes through game content and play. It enhances learning by providing learners with a sense of achievement by solving problems and challenges. It is based on a fully-fledged game, commonly named a serious game[3].

1.1.3. Types

According to Kapp, there are two main types of gamification:

a. Structural gamification No changes are made to the content itself to become game-like; however, they are only made with the structure around the content to sound like a game. This type aims at motivating the learner to get engaged in what they learn through rewards. The most common elements in this type are points, achievement badges and levels.

b. Content gamification Changes are made to the content to make it more game-like by applying game elements and game thinking. This type focuses primarily on repacking the language content to make it more attractive and stimulating for learning[6].

2. Literature Review

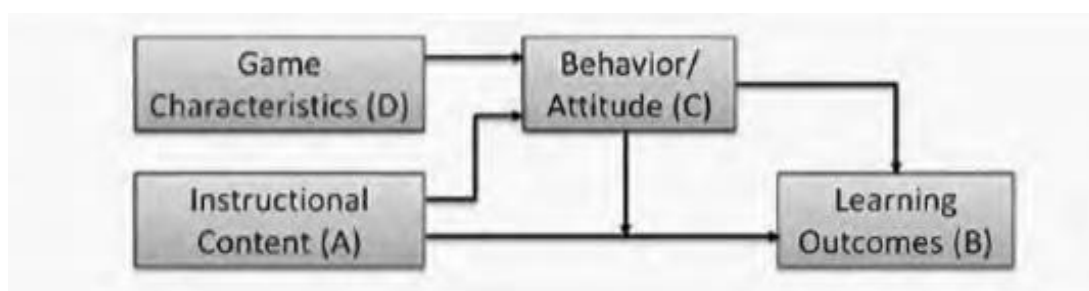
2.1. Grammar role in language learning Grammar

Grammar plays a significant role in foreign language learning accurately and fluently for it is the heart of language as claimed by Saaristo. Agape (2015) states that grammar is necessary to convey expressions precisely in oral or written discourse since it ties closely into vocabulary in learning and using the foreign language as well as it can evolve from the learning of chunks of language. This is in line with the findings of the analytical study that was conducted by Kumar, Kumar and Sagar. In this study, they referred to the importance of grammar learning in an English as a Foreign Language (EFL) context for better speaking and writing as well as effective listening and reading. To sum up, grammar learning and its appropriate usage are necessary for effective and competent EFL communication since the role of grammar in communication comes in organizing words, clauses and phrases into meaningful sentences[6].

2.2. Theory of Gamified Learning

The hypothesis of this study was based on the theory of gamified learning. Figure 1 shows the foundation of the gamified learning theory, which includes two processes by which game characteristics can affect learners' learning outcomes. The first one is called mediating process. The game characteristics influence learners' behaviors that moderate instructional content. In this case, better instructional content can improve learners' achievement. However, if the fantasy (a game characteristic) is incorporated, learners' engagement (attitude) would be enhanced. That strengthens the relationship between learning outcomes and instructional content. The latter is the moderating process in which the relationship between the game characteristics and students' learning outcomes is mediated by their behaviors or attitudes[3].

Figure (1) Theory of Gamified Learning



2.3. Elements of the Gamification Process

According to McGonigal (2011), four traits that define the gamification process include a goal, rules, a feedback system, and voluntary participation. The goal is the outcome that players are expected to achieve. In an educational setting, a clear and achievable goal is essential because it orients students' participation during the activity. The rules set the guidelines on how to achieve the goal as well as limitations on the gameplay. This provides learners the directions which help them to work creatively to complete the tasks. Feedback systems enable players to keep track of their progress and encourage them to continue to play. In fact, appropriate and timely feedback and providing learners enough time to react to that feedback play a crucial role in gamification. Voluntary participation refers to the participant's acceptance of a set of rules and providing the appropriate challenges that ensure a balance between fun and stress for the players. In other words, this feature concerns learners' sense of agency in their study and the suitable assignments that meet their needs[3].

3. Methodology

3.1. Design

This study focuses on an effect of using Gamification in teaching and learning Grammar in Zahedan classroom context. Therefore a quantitative data collection method was employed for this study.

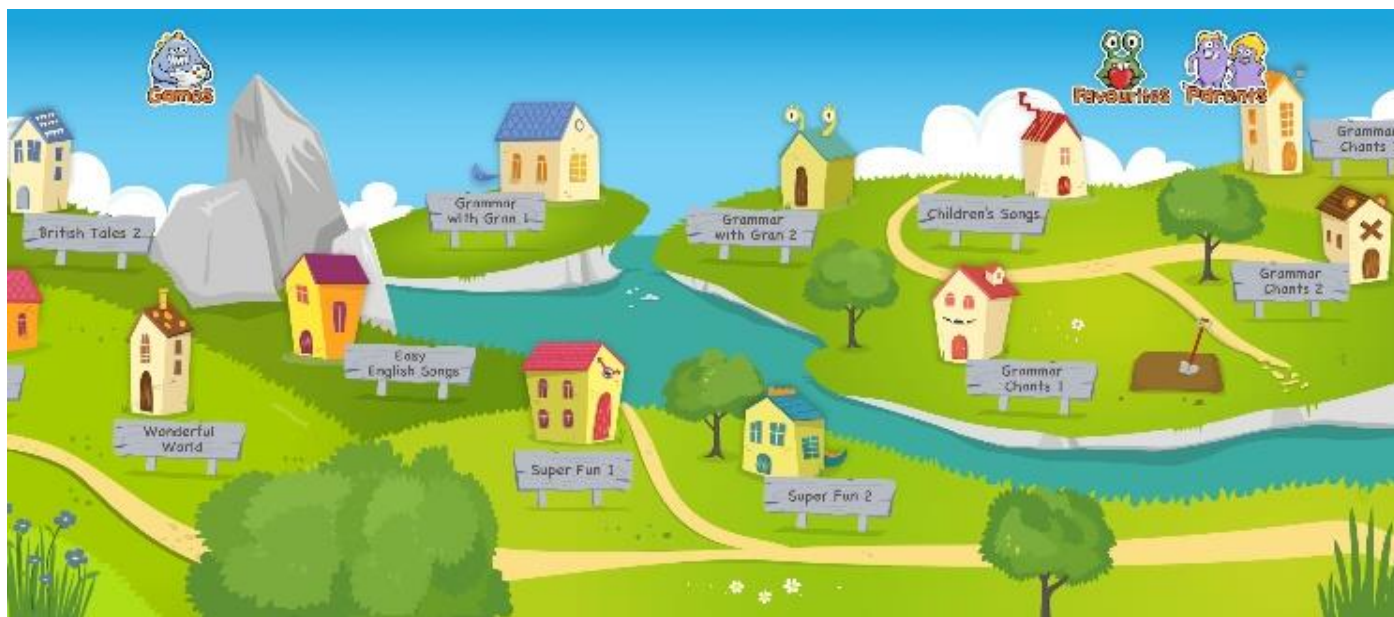
3.2. Participants

The participants of the current study were 20 young language learners in a private language teaching institute in Zahedan, Iran. The mean age of the participants was 9 . Regarding previous language learning experience, none of the students had received any formal English language training in the past. Participants were divided into an experimental group (N = 10) and a control group (N = 10) based on (1) their access to smart phones and use of grammar games and (2) to learn grammar from the traditional text-based materials use on print.

3.3. Materials

As the main materials for learning English grammar, a freely available mobile application was used. In this regard, the participants installed "play time" which is a grammar learning application for 5 to 12 years of age children. The application integrates gaming features in teaching basic grammar in English related to simple present, adjectives, auxiliary verbs etc. The activity types for teaching grammar also includes (1) watching videos and stories , (2)listening to songs, (3)learning grammar with related games (Figure 2).

Figure (2) Grammar Learning Application



3.4. Procedures

The study focusing on gamification intervention for grammar improvement, the implementation involved incorporating interactive mobile applications and platforms to help learners enhance their grammar skills. Following this, the Participants were completed a pre-test to assess their baseline knowledge of English grammar. The pre-test will consist of multiple-choice and fill-in-the-blank questions covering a range of grammar levels. Two learning conditions for the experimental and control groups were implemented and they were provided access to language learning apps that offered a variety of activities such as flashcards, quizzes, songs, stories, and exercises to engage them in grammar learning. In this regard the experimental group used grammar apps on Mobile devices. The control group taught grammar using conventional methods like textbooks. The participants used the materials for 30 minutes every day during the 3 days of the week. The treatment lasted for 4 weeks, and participants were tested again to document any change. Finally a post-test was administered four weeks later to measure the learning outcomes.

3.5. Data Analysis

In this study, the collected data were analyzed for descriptive statistics using SPSS. In this regard, the mean and standard deviation were calculated for the scores before and after the test. The between-subjects variable in this study was a group with two types (experimental or control) and the within-subject variable had two pre and post-test levels.

4. Result

Table 1 summarizes the results of descriptive statistics related to the performance of the participants in the grammar in pre and post test. According to the pre-test the mean values for were 5.9 (SD = 2.48) for the experimental group, and 5.4 (SD = 2.43) for the control group. As for the post-test, mean values were also 18.3 (SD = 1.45) and 13.4 (SD = 1.94) for the experimental and control group respectively.

Table 1- Descriptive Statistics

Group		Mean	Std . Deviation	N
pre-test	Experimental	5.9	2.48	10
	Control	5.4	2.43	10
	Total	5.57	2.24	20
Post-test	Experimental	18.3	1.45	10
	Control	13.4	1.94	10
	Total	15.55	3.72	20

Incorporating gamification in teaching and learning grammar has been shown to have numerous benefits. Gamification can make the learning process more engaging and enjoyable for students, increasing their motivation and willingness to participate actively in lessons. Using game elements such as points, challenges, levels, and rewards, teachers can create an interactive learning environment that fosters critical thinking, problem-solving skills, and collaboration among students. Studies have indicated that gamification in teaching grammar can lead to improved retention of grammar rules and usage, as students are more likely to practice and apply what they have learned in a fun and interactive way. Additionally, gamification can also provide immediate feedback to students, allowing them to track their progress, identify areas for improvement, and tailor their learning experience to meet their individual needs. Using gamification in teaching and learning grammar can enhance student engagement, motivation, retention, and overall learning outcomes. It's a win-win strategy for both educators and students.

5. Discussion

Gamification in teaching and learning grammar involves incorporating game elements to engage students in the language learning process. By integrating features such as points, leaderboards, levels, and rewards into grammar lessons, educators aim to increase student motivation, participation, and understanding of grammatical structures. One key benefit of using gamification in grammar instruction is that it can make learning more interactive and fun for students. Games create a sense of challenge and enjoyment, leading to higher levels of engagement and retention of grammar rules and concepts. Additionally, gamified activities can enhance collaboration among students, promote healthy competition, and foster a positive learning environment. Furthermore, incorporating gamification in grammar lessons can help address individual learning styles and preferences. By providing a variety of game-based activities, educators can cater to visual, auditory, kinesthetic, and tactile learners, ensuring that all students have the opportunity to learn and practice grammar in a way that resonates with them. This personalized approach can lead to improved student outcomes and increased academic performance. However, challenges may arise when implementing gamification in teaching grammar. Educators need to strike a balance between the entertainment value of games and the educational objectives of the lesson. It is essential to design gamified activities that are not only engaging but also aligned with the learning goals and curriculum standards. Additionally, educators must consider accessibility issues to ensure that all students can participate in game-based learning activities effectively.

6. Conclusion

In conclusion, the use of gamification in teaching and learning grammar has the potential to transform traditional language instruction by increasing student engagement, motivation, and understanding. By leveraging game elements to create interactive and enjoyable learning experiences, educators can foster a dynamic classroom environment where students actively participate in grammar lessons and develop their language skills. While challenges exist in implementing gamified activities effectively, the benefits of incorporating games into grammar instruction are numerous. From enhancing student motivation to addressing diverse learning styles, gamification offers a promising approach to make language learning more engaging and meaningful for learners of all ages. Furthermore, gamification offers opportunities for personalized learning pathways, instant feedback, and collaborative problem-solving, which can cater to diverse learning styles and preferences. This innovative approach not only makes the process of learning grammar more interactive and fun but also contributes to long-term knowledge acquisition and application. As we

embrace the digital era and the evolving needs of learners, integrating gamification strategies into grammar education can undoubtedly be a valuable and impactful tool for educators seeking to optimize student learning outcomes . By embracing innovative teaching strategies like gamification, educators can empower students to succeed in mastering grammar and communicating effectively in the target language.

Reference

- [1] K. Al-dosakee, “Gamification in Teaching and Learning Languages : A Systematic,” vol. 13, pp. 559–577, 2021.
- [2] R. Jannah, H. Nor, and R. Asfihana, “Journal of English Language Teaching,” vol. 6, no. 1, pp. 122–133, 2023.
- [3] A. T. Pham, “The impact of gamified learning using Quizizz on ESL learners ’ grammar achievement,” vol. 15, no. 2, 2023.
- [4] R. Smiderle, S. J. Rigo, L. B. Marques, J. Arthur, P. De Miranda, and P. A. Jaques, “The impact of gamification on students ’ learning , engagement and behavior based on their personality traits,” 2020.
- [5] S. Zhang and Z. Hasim, “Gamification in EFL / ESL instruction : A systematic review of empirical research,” no. January, pp. 1–12, 2023, doi: 10.3389/fpsyg.2022.1030790.
- [6] M. Abu, E. M. Abu, M. Abu, E. M. Abu, and I. Faculty, “Guided Discovery Based Gamified Tasks for Improving Primary Pupils ’ Grammar Learning,” vol. 63, 2017.