How Can Gamification Help Language Learners? Insight From EFL Students And Teachers

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Abstract

Gamification, integrating game elements in non-game environments, has garnered significant interest as an educational strategy. However, there is a need for more research focusing on its efficacy in learning English as a Foreign Language (EFL). This study aims to address this gap by exploring EFL students' learning experiences with gamification and synthesizing the factors that enhance language learning. In this study, four vocational school students and an EFL teacher participated in a classroom where gamification techniques were implemented for four consecutive weeks. To gather data, individual semi-structured interviews were conducted with the participants to gain insights into their perspectives. The data were then analyzed using thematic analysis. The findings of this study highlight the significant contributions of gamification in EFL learning by leading to better student engagement (behavioral, emotional, and cognitive), and providing immediate feedback and task level.

Keywords: Gamification, language learning, EFL, educational strategy and perception.

I. INTRODUCTION

Gamification, a concept introduced by Kapp (2012), refers to applying game elements and mechanics in non-game contexts, such as work-related tasks, educational processes, or customer engagement initiatives. It aims to engage people, motivate actions, promote learning, and solve problems using game mechanics, aesthetics, and thinking (Deterding et al., 2011; Huotari & Hamari, 2012). It is essential to distinguish gamification from related concepts such as serious games, game-inspired design, and simulations. Serious games are specifically designed for training or educational purposes, while simulations replicate real-world scenarios for training. Game-inspired design involves adopting the ideas and thinking inherent in games without necessarily incorporating game elements. In contrast, gamification focuses on applying game elements and metaphors outside games to enhance motivation and commitment and influence user behavior (Marczewski, 2013). The main objective of gamification is to evoke game-like experiences similar to those found in games and to produce specific behavioral outcomes. In education setting, for instance, gamification can be used to achieve specific educational objectives, such as enhancing student motivation and improving learning outcomes. This may happen due to the exhilarating nature of games, such as challenges, rewards, and competition creating engaging and interactive experiences for learners (Qiao et al., 2022).

In line with this, Huotari & Hamari (2012) emphasized that critical features of games, including active user participation, challenges and objectives, point accumulation, progression through levels, badges as rewards, and ranking systems based on achievements, play a significant role in gamification. Several studies have examined the effects of gamification on language learning. A study by Lee & Hammer (2011) showed that using a game-like approach in vocabulary learning significantly improved students' vocabulary knowledge and retention. Similarly, Chen's (2023) study showed that gamification applied in translation course effectively increased students learning outcomes. In academic writing, El Tantawi et al., (2018) conducted research and discovered that gamification not only improved the academic writing performance of students but also enhanced their motivation and reduced negative attitudes towards writing. Furthermore,

Thuy & Hung (2021) conducted a study examining the impact of gamification on teaching speaking to young learners. They observed a positive effect of gamified approaches on student engagement and motivation, leading to enhanced speaking skills.

This highlights the potential of gamification to transform the learning experience and cultivate a positive attitude towards challenging language tasks. Previous studies underscore the potential benefits of incorporating gamification in language learning contexts. Although those have demonstrated that gamification can be effective in language learning, most of them are experimental and focus on examining the effects of gamification quantitatively (Zhang & Hasim, 2023). In addition, the focus of the research was mainly on the students. Therefore, there needs to be more research exploring both students' and teachers' perspectives on learning a language with gamification. By understanding both perspectives, we can gain valuable insights into how students and teachers experience and engage with gamification in EFL practice. Accordingly, this study aims to answer the following research question: 1. What are students' and teachers' perceptions of gamified EFL classrooms? 2. What benefits does gamification offer for language learning?

II. METHODS

Research Design

This study used a qualitative research approach to investigate the effects of gamification on English as a Foreign Language (EFL) learning. This study was conducted in a classroom setting, concentrating on a vocational school where EFL instruction was provided.

Participant

Four vocational school students and one EFL teacher were the study's participants. Participants were chosen based on requirements such as no prior exposure to gamification and their willingness to participate in the study. Before taking part in the research, each participant gave their informed consent, ensuring participants' rights were protected and confidentiality was upheld throughout the study.

Data Collection

Over four consecutive weeks, the gamification approach was incorporated into the language teaching. Missions, Points, badges, leaderboards, and time constraints were some of the gamification elements used to increase student's motivation, engagement, and involvement with the course materials. After the intervention, individual semi-structured interviews with the participants were used to gather the data. The interviews aimed to learn more about how the participants learned through gamification and to understand the variables affecting their language learning process. With the participants' permission, the interviews were audio recorded and then transcribed for analysis.

Data Analysis

The interview data were analyzed using a thematic method. Several steps included were data familiarization, coding, categorizing coded themes, and the discovery of new themes regarding the influence of gamification on participants' learning experiences (Braun & Clarke, 2006).

III. RESULTS AND DISCUSSION

Based on the analysis, five themes emerged from the data. The thematic analysis results are presented below.

1. Engagement

In line with student engagement theory proposed by Fredricks et al., (2004), the first theme produced three sub-themes. They are behavioral engagement, emotional engagement, and cognitive engagement. Behavioral engagement is related to students' active participation during learning process. Emotional engagement covers the feeling students have towards the teachers, peers, and learning atmosphere. While cognitive engagement is highly connected to students' effort when learning challenging materials (Peng, 2021).

a. Behavioral Engagement (Active Participation)

Both the students and the teacher stated that gamification successfully increase overall classroom participation. They even noticed that some students, who previously gave less attention and participation, enjoyed and participated in the activities.

"Gamification increases classroom participation. Usually only one or two people are involved. Now almost all of my friends are active, even those who usually sleep during class can join the mission." (Student 4)

"Usually when I teach, only certain students pay attention. With gamification, students who are usually passive become enthusiastic about learning." (Teacher)

"I am happy to see my friends who are usually lazy, pay less attention, are now involved and doing the tasks given." (Student 2)

Student 1 expressed that the gamified activities were giving him so much excitement. He thought that was the reason why he and his classmates become more involved during the lessons.

"Gamification makes us more active. The selected games are fun, so I like it. Because I find it exciting, I want to answer questions continuously." (Student 1)

The finding is in line with Handayani et al., (2021) study investigating gamification effects on learning participations. It emphasizes that gamification increases active participation through the game elements used, particularly the leaderboard.

b. Emotional Engagement

Motivation

The teacher said that students are highly motivated to achieve the highest score. They want to be the winner of the competition that gamification offered.

"With this gamification, students are moved to compete for higher scores." (Teacher)

The students also agreed with the teacher's statement. Further, they stated that the rewards or points encouraged them to do the gamified activities better.

"What is uplifting is the scoring system. If you answer the question correctly, you get higher points, so I want and always try to answer the question correctly" (Student 1)

"I put more effort into doing the task/mission given. I'm happy if my answer is correct and gets points from my teacher." (Student 4)

Another interesting point was that students might also get motivated from seeing their friend's performance at class. As stated by Student 3, she believed that she could achieve the same as her friends did.

"I'm motivated because I see my friends. If my friends can complete the mission well, so can I." (Student 3)

Enjoyment

All students expressed enjoyment learning with gamification. They also said that gamification change the learning atmosphere and contrasted previous condition with current situation and indicated how gamification could bring differences.

"Without games, it's just a normal class. But when using games, the class atmosphere is livelier and more exciting." (Student 1)

"Now it's more exciting because I am learning while playing, so I don't get bored." (Student 2)

" The usual class was tense and quiet. We only focused on listening to the teacher's explanation. The classroom atmosphere is now livelier, exciting and does not make me sleepy." (Student 3)

Also, Student 4 indicated that the feeling of enjoyment contributed to helping him understand the lessons.

"I usually get dizzy because I felt this subject is complicated. I don't understand the lesson. When my teacher uses games, I can relax during the class, and it is easier to understand the lesson" (Student 4)

According to Csikszentmihalyi (2014), students taught with gamification experience a sense of flow. This is the feeling of being fully immersed in an activity that makes them pleasant or enjoyed. In addition, a prior study by Ozhan, S & Kocadere (2020)

elucidated that there is a connection between sense of flow and engagement with motivations. As the student enjoy the lessons, they get more motivated to learn and achieve better learning outcomes.

Perseverance

The teacher compared students attitude prior and after learning with gamification. She noticed a difference in her students' perseverance after receiving the intervention.

"Usually, my students give up easily when there are challenging tasks or materials. Through gamification they can work together to the end. they focused on doing the mission given, even though they are approaching school hours." (Teacher)

Most students were also willing to make improvements and do better even after making mistakes during the missions.

"Even though they make mistake, they still want to improve" (Teacher)

"When I fail to get high score, I feel a little bit sad, but only for a while. I'm excited to do even better in the next mission." (Student 2)

The result confirms that gamification can change participants behavior. In this case, it is to promote better learning attitudes. Ding (2019) points out that the game elements included in gamification is in charge of encouraging learners to achieve more. Students are motivated to learn more and increase their perseverance to reach this goal.

c. Cognitive Engagement (Knowledge Attainment and Retention)

Students admitted that gamification makes language learning less difficult. They also expressed more ease to recall new words they learned.

"With games learning is easier." (Student 1)

"I have an easier time learning and remembering new vocabulary" (Student 2)

Interestingly, when learning with gamification, low achievers might outperform the high achievers in class, as stated by the teacher.

"I was amazed to see how low-scoring students perform better than high achiever students through gamification." (Teacher)

Both the teacher and the students confirmed that gamification leads to better retention. Students could remember the lessons better even after a while.

"After teaching with gamification, when asked several questions at the next meeting, my students remember the previous lesson well. It seems that this strategy makes the learning process easier. The students seem easier to understand and recall the lesson." (Teacher)

"Usually I quickly forget after learning, but when the teacher uses games, I can still remember some vocabulary taught." (Student 3)

Students learning with gamification experience lower cognitive load-mental effort when someone learn something-as gamification commonly includes multimedia elements. These multimedia elements, when applied appropriately, are believed to contribute to lower cognitive load (Brown, 2018). When the cognitive load is low, learners have proper working memory to process the materials learned, thus, they can have better long-term memory (Hsu, 2016).

2. Immediate Feedback

One of the gamified missions given was a writing exercise in Padlet, an online wall where everyone could see and give comment to their friends' post. Through such activities, students could receive immediate feedback both from the teacher and their peers.

"When answering questions in Padlet, there were some mistakes, and they were immediately corrected by the teacher." (Student 3)

Student 4 added he could learn and get example from his friends. For example, in a speed round, the teacher commonly give opportunity to other groups to answer questions incorrectly answered by a previous group. By answering correctly, the following group give feedback to the previous group.

"When my answer is incorrect, I can understand how to answer correctly by looking at the way the other group answers" (Student 4)

Dihoff et al., (2004) revealed that the immediate feedback received by learners facilitates learning better compared to the delayed feedback. Moreover, Fu & Li (2020) found that immediate reinforcement led to better second language development on language learners.

3. Task-Levelling

When designing a gamified lesson, it was possible for the teacher to split materials into small parts or short activities. Consequently, it also simplified the materials for the students. As Mayer & Moreno (2003) pointed out, segmenting lessons into small sections may lower cognitive load and result in better information processing.

"I like learning with games because they are simple, the tasks are just simple" (Student 4)

"Maybe it's because the materials and tasks are broken down into missions, so students can learn gradually." (Teacher)

Besides, the availability of different missions allowed for the teacher to set difficulty level of the materials. Missions can be ordered according to the difficulty level, and it might give additional excitement as the missions get more challenging over time.

"Learning can be increased in difficulty through missions" (Teacher)

IV. CONCLUSION

The findings of this study confirmed that gamification approach can help language learning in several aspects, particularly related to students' engagement. Gamification can improve students' behavioral engagement through increased classroom participation, foster emotional engagement by making learning enjoyable, and support engagement by reducing cognitive load and improving knowledge retention. Additionally, gamification supports task-levelling which help simplify the materials. Students can also learn gradually based on the difficulty level or complexity of the materials Then, gamification facilitates immediate feedback for learners which is known to have role in second or foreign language development. This study only involved a small number of participants and was conducted in a specific context. Consequently, the findings of this study may not fully represent other settings. Future research is suggested to look into broader context and include more participants, so that the results can be generalizable to various settings.

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