

Gamification in Foreign Language Learning: Perspectives from Young Users

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Abstract: Language learning has changed from an interest to a necessity due to today's multicultural environment. Digital learning tools come out to the market to fulfill such a demand. To keep up with the learners' motivation and attract more language learners, some digital tools are based on gamification. Based on user interviews, this paper researches the use of gamification in foreign language learning, focusing on the learners' experience. The results indicate that gamification is good at keeping up learners' enthusiasm for learning but may also hinder learning by representing a potential distraction.

1. Introduction

There is increasing interest in gaining language skills to access information or live on the other side of the world (Ivanovna et al., 2020). Due to today's multicultural environment, language learning has changed from an interest to a necessity. The demand changes not only appear on language learning but also on the methodologies of teaching. People born in the age after the appearance of advanced technologies, when society has already commonly used technology devices, are referred to as “digital natives” who especially require new teaching methodologies (Arce et al., 2020). Different learning methods and resources have come into existence in response to the demand, such as language-teaching organizations, books, videos, etc.

Technology developments have made language learning even more accessible— digital learning tools have made it possible for people to learn anywhere, anytime (Afshari, 2013). However, studying languages, which requires a lot of memorization, can be difficult and tedious. People developed new platforms, such as Baicizhan, Duolingo, etc., to resolve such barriers by incorporating game-based language learning processes.

This paper examines whether game-based language-learning apps are an effective learning method. Based on interviews, we will find out how users experience game-based learning when studying foreign languages and the opportunities and challenges of using gamification in foreign language learning.

This research paper will first introduce the current findings on gamification-based learning and then switch to the studying focus of the user's experience of using such platforms while learning foreign languages. The paper will discuss the data collection and findings. Finally, it will end with future studying directions.

2. Literature Review

Gamification, which involves the use of a rewarding mechanism that promotes the motivation of the learners (Arce et al., 2020), has been used increasingly in language learning, as it promises to enhance teaching efficiency by promoting educational objectives. “Gamification has become a tendency” (Figuerola, 2015, p. 42) in learning. It is sometimes referred to as the serious game. Educational gamification is explicitly designed to fulfill the needs of gaining knowledge using the following five-step processes:

- Understanding the Target Audience and the Context
- Defining Learning Objectives
- Structuring the Experience

- Identifying Resources
- Applying Gamification Elements

Gamification methodology could benefit second language learning in various ways. Objectively, it creates a relaxed atmosphere to comfort second language learners (Figueroa, 2015). Statistics show that in learning a second language, dropping out is an obstacle among beginners (Aleman et al., 2016). Gamification may turn out as a solution for self-volunteered dropping due to deceased interests. Many online platforms and mobile apps often embed some sort of competition, which is another approach to attracting users to learn a second language (Rego, 2015). Furthermore, competitiveness is beneficial in helping with developing cognitive skills.

Beyond raising interest among users, using mobile device technology in second language learning has other benefits. Before any apps introduce gamification features, they have already created a learning system with high memory capacity, built-in video cameras, voice recording, and other features that aim at helping the second language learning experiences (Rego, 2015). These features hold importance in second language learning as a language requires the learners to recognize, pronounce, write, and use. Mobile devices help with such features and can be more beneficial than traditional learning methods from books and dictionaries. The mobility of mobile devices is the second benefit of gamification platforms. It provides users with a “ubiquitous way of getting information (Rego, 2015),” which means that the learners can access the learning platforms to learn at any time, anywhere. Language learning is unique from other subjects as it does not require dedicated time; thus, the ubiquitous feature can benefit learners.

The gamification-based mobile learning methodology is designed to promote learners’ motivation, thus bringing pedagogic beneficiaries. However, it still requires proceeding with precautions (Figueroa, 2015). It’s still worth studying the limits of using game-based methodologies in teaching because being too fixated on gamification may bring distractions to learning (Mogavi et al., 2022) which turns away from the initial expectation. This paper focuses on second-language learners who use gamification platforms to achieve their learning goals. Instead of comparing the effectiveness of the learning apps, this paper will study the users’ experiences to find out whether gamification methods are beneficial for study, especially in second language learning.

3. Methods

3.1 Data Collection

The researcher conducted six semi-structured interviews with students enrolled in a large US private university (see Table 1). The participants are between the ages of 20 to 25, three of whom identified as male and three as female. All the interviewees have had at least one year of experience using game-based learning apps or online platforms to study foreign languages. English and Spanish are the two foreign languages the participants studied.

Table 1. Overview of research participants.

Participant pseudonym	Age	Gender	Native Language	Language Studied	Platforms Used
Jessica	24	Female	Chinese	English	Shanbay
Robert	24	Male	Chinese	English & Spanish	Shanbay
Yolanda	22	Female	Chinese	English	Baicizhan
Philip	25	Male	Chinese	English	Quizlet
William	23	Male	Chinese	English	Baicizhan
Joy	21	Female	Chinese	English & Spanish	Duolingo

The participants’ recruitment was done via the researcher’s personal networks. The researcher took

comprehensive notes during the interviews, and upon the participants' agreement, most of the interviews were recorded. All participant names appearing in this paper are pseudonyms.

3.2 Data Analysis

The researcher started the data analysis once all the interviews were completed. For the interviews with recordings, the researcher converted the recordings into text through an iPhone, then compared and edited the notes. After carefully reviewing all the notes, the researcher identified common patterns in the data, putting the interviewees in conversation with each other.

4. Findings

All the interviewees have experience with different language learning apps or platforms with game features for at least one year, and one has continuously used it for five years. But they are not using the same mobile app or platform. Quizlet, Baicizhan, Shanbay, and Duolingo are the most commonly used apps among the interviewed students. The results from the interviews revealed some similarities and conflicts, but in general, everyone agreed that the gamification parts enhanced their learning experiences. However, it still has drawbacks in the case of long-term studying.

In foreign language learning, gamification-based learning platforms may promote study motivation, customize study plans, and enhance learning experiences. And since the apps can be accessed through phones or laptops, it does not limit their users on when and where to study. Plus, the app or platform itself is a library or a dictionary. Thus, it's both convenient and affordable. The users can learn anytime they have a chance, and they don't need to buy and carry physical books. Philip said that the apps allow him to turn his small timepieces into effective study times: he could play a set of word games whenever he was waiting in lines. "Unlike carrying a book, besides being convenient, playing such games in public does not makes me look nerdy," he joked. Robert mentioned that he used to purchase dictionaries and exercise books until he got introduced to mobile learning apps, which saved him money on getting the learning materials.

Many of my interviewees mentioned that the learning apps calculate how often students make mistakes on certain words so that they show that word repeatedly at a reasonable frequency, thus forcing the users to review and learn from mistakes. The platforms also make plans for their users according to the forgetting curve so that they can study in the most effective ways. Robert said he was terrible at making study plans, and the app helped a lot. The gamification-based apps design daily tasks instead of a schedule-like plan and allow students to see their status. Overall, the students would be more willing to start and more likely to complete their daily tasks.

The gamification language learning apps create dynamic learning methods to attract users to study more. The learning process becomes multiple gaming tasks. There are reminders for users to complete the tasks. The tasks, or games, make learning a fun experience. Completing the games is rewarding and thus attracts the users to study more. Joy mentioned that she felt missionary in completing all the tasks and answering everything correctly. Some of the learning apps allow users to compete against each other. This feature allows their users to encourage each other to study consistently rather than giving it up after a few days. Jessica recalled that before she took an important exam, she used Shanbay with one of her classmates. They checked each other's learning progress and reminded each other to study. She said that she wouldn't study that much if she weren't competing with her friend. And the competition itself can be rewarding and advantageous.

Another benefit of the gamification-based mobile language learning app comes from its teaching method. The apps allow users to learn from multiple aspects, such as listening, making sentences, and visualizing. Relating the words to images is one of the most mentioned among the sample group. It could help visualize the word's meaning, thus making it better at memorizing them. Joy gave an example of recalling the word she studied in the app when saw something similar to the image in her real life. She says such experiences made her permanently memorize that word. However, this feature also has shortages. My interviewees agreed that the image and word pairs made memorization easier. However, it may hinder their study since most images are appealing and, to some extent, funny. They would recall the image rather than the meaning of the word. Sometimes the image may not be useful,

and it can confuse understanding. William specifically said that he thought the images caused more trouble than its beneficiaries.

Gamification certainly promotes the users' learning motivation, but it also gives them more reason to spend time on their phones. It's hard to concentrate since there are other attractions on the internet. Two interviewees find themselves on social media a few minutes after using such an app.

The sample group had memorization problems with learning based on the gamification method. People felt that what they learned was more likely to form "short-term memory." They find that it's more likely to forget the words they learned in game-based platforms than what they learned in traditional means, such as in the classroom. Yolanda told me that she focused on passing all the tasks, which sometimes made her focus on finding the tricks to pass the game instead of learning the material. And this led to a very short-term memory of what she was supposed to learn.

In terms of improvement for gamification language learning platforms, my sample group mentioned teaching methods and technological tricks. It would be helpful if the app or platform could show similar words together. For example, after learning "strike," it would be beneficial if "struck" is listed and make the users aware of the difference. If the learning app could provide an "immersive experience," it means the notifications from other apps could be blocked. For example, if they can use the phone only for this app during a preset time, it would be beneficial for them to concentrate.

5. Discussion

The results indicate that gamification-based language learning on mobile platforms for college and graduate students promotes motivation, suggests optimal learning plans, and improves the learning experience. It makes language learning more accessible and affordable. It also attracts more learners since it has made language learning a fun experience, in line with the goals of gamification. However, the gamification-based language learning method should still be applied with precautions. The interview results show that game elements might distract users' attention from learning. Users could focus on the game too much and remember the gaming part but fail to learn the actual word's meaning. And since the platforms function with digital devices, which leaves the users with enormous sources of distractions. The research findings discover the non-obvious hinders to gamification methods in foreign language learning.

Thus, it will be worth studying how to design good games for learning foreign languages. According to the interviews, the competition part works well for keeping up with the users' motivations. More competition and more types of competition might be worth launching and then monitoring their impacts. The interviews revealed that image-related games are very likely to be problematic since the various interpretation of images affects the users' recognition. Thus, new games can be designed to include fewer images and include more spelling or reading to mimic the influence of non-core information while enhancing multiple ways of recognition of the words. On the technical end, the developer could also try to allow the learning app to block other non-emergent device uses for a temporary time to force the users to only focus on learning with the device.

In terms of age, this paper focused on users in their early 20s. Further studies should examine how younger users, as well as older users, perceive these gamified experiences. Different age groups might react to the type of games differently. For example, the current sample group responds that the image type of the game is not very helpful, but younger kids or the elderly might think otherwise. Thus, it's worth studying whether there should be gamification classified by age groups in foreign language studying. It's very likely that people learn differently at different age stages. It's worth exploring how gamification-based approaches should cater to different age groups differently to maximize its usefulness.

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Appendix:

Interview Questions

- 1) Have you used game-based apps or platforms to study foreign languages? What are they? How long did/have you been using it?
- 2) What features do you think best helped your learning? Can you give me a few examples?
- 3) What features do you think that has hindered your learning? Can you explain with examples?
- 4) If you were the software developer, what would you do to improve the users' satisfaction or to better fit their needs as a learner?