The use of gamification to enhance the English as a foreign language

El uso de la gamificación para mejorar el inglés como idioma extranjero

O uso da gamificação para aprimorar o inglês como língua estrangeira

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**Resumen**
Aprender un nuevo idioma es importante en la vida contemporánea y una meta para profesores y estudiantes, pero no siempre es divertido y los estudiantes pueden perder la motivación para aprender. Nuevas técnicas y estrategias se han proporcionado para motivar a los estudiantes de lenguas extranjeras. Una de esas herramientas es el uso de la gamificación, específicamente, de la plataforma “hot potatoes”. El principal objetivo de este proyecto fue usar esta plataforma para mejorar la motivación y el aprendizaje del inglés en estudiantes universitarios. Para lograrlo, la plataforma “hot potatoes fue aplicada a 20 estudiantes de diferentes niveles de inglés. La aplicación de juegos interactivos dentro de la plataforma “hot potatoes” tuvo muy buenos y notorios resultados que dan cabida a la conclusión de que su aplicación es una herramienta entretenida y dinámica que ayuda a mejorar la motivación y aprendizaje del inglés como lengua extranjera en los estudiantes universitarios.

**Palabras claves:** Gamificación; plataforma hot potatoes; inglés; estudiantes; motivación.

**Abstract**
Learning a new language is important in contemporary life and a goal for teachers and students, but learning is not always fun and students may lose the motivation for learning. New techniques and strategies have been provided to help motivate foreign language learners. One of those tools is the use of gamification, specifically the platform "hot potatoes". The main objective of this project was to use that platform to enhance the motivation and learning of English university students. "To achieve it, the "hot potatoes platform was applied to 20 students of different levels of English knowledge. The application of interactive games within the platform “hot potatoes” had very good and notorious results that give room to the conclusion that its application is an entertaining and dynamic tool that helps to improve the motivation and learning of English as a foreign language in university students.

**Keywords:** Gamification; hot potatoes platform; EFL; students; motivation.

**Resumo**
Aprender um novo idioma é importante na vida contemporânea e em um meta para professores e alunos, mas não é divertido e divertido para os alunos que estão perdendo a motivação para
a aprender. Novas técnicas e estratégias foram fornecidas para motivar os estudiosos de lençóis extrangeiros. Um dos herra"mientes é o uso da gamificação, especificamente, da plataforma “hot potato”. O principal objetivo deste projeto é usar esta plataforma para melhorar a motivação e o aprendizado de inglês nos estudantes universitários. Para lograrlo, a plataforma “hot potato” foi aplicada a 20 estudantes de diferentes idiomas ingleses. O aplicativo de jogos interativos dentro da plataforma “batatas quentes” ajuda bastante e notifica resultados que danificam a conclusão de quais aplicativos são um entretenimento heráldico e dinâmico que ajuda a motivar e aprender o inglês como língua estrangeira em inglês estudiant"es universitarios.

**Palavras-chave:** Gamificação; batatas quentes de plataforma; Inglês; estudantes; motivação.

**Introducción**

The use of Gamification in educational settings toward EFL involves pedagogical approaches, methodologies, and strategies. All of these are part of the transition made by language learning instruction throughout generations. Several motivational strategies and approaches used in traditional pedagogy are also part of this transition, including Behaviorism, Cognitivist approaches, along with social interaction and sociocultural theories.

Today's university education faces great challenges, being responsible for the training of professionals who must be inserted into a labor world mediated by constant technological advances that require specific skills for different areas of knowledge and labor and also personal skills related mainly to critical thinking, problem-solving, persistence and collaborative work. These skills are widely addressed by the teaching technique called gamification, which will be developed as the main theme in this research work. Gambling, or gaming-based learning, is a trend that, since 2008, has been simultaneously implemented in various contexts such as training of work, social media and recently in educational and other activities. It is, in itself, a technique that provides opportunities for teachers to incorporate active learning into their curriculum, teaching sessions, as it promotes student motivation and commitment to what they learn. This research emphasizes the importance of the use of recreational practices in the field of education and language teaching in particular. These activities are taken to the classroom to stimulate an environment conducive to enjoyable and effective learning. Learning by playing facilitate the internalization of contents and enhance the integration of the student body and the teamwork. The basis of gamification is played, a term described by Salen and Zimmerman (Salen &
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Zimmerman, 2004), in their book Rules of Play: Game Design Fundamentals, as a system in which players wrap themselves in an artificial challenge defined by rules, interactivity and feedback, which ends with a quantifiable result. With its use in the field of education is intended to include elements of game theory and achieve the motivation of students towards what they learn. This section explains the most relevant concepts and terms within this work such as games, game based learning and gamification. In the same way, the relationship of these notions with other influential factors in this study such as motivation, education and language teaching and learning is discussed.

The game

When we mention the word game, we immediately think of fun and entertainment, but to better understand the concept and its uses in education, we must define it correctly and identify its most familiar parts or elements. Here are some definitions of that term. Beginning with its etymology, the word game, for Sanuy, quoted in Chacón (Chacón, 2008) "comes from the English term "game" which comes from the Indo-European root "ghem" which means to jump for joy... in it should be given the opportunity to have fun and enjoy while developing many skills. According to Ahmed and Rahman, (Ahmed, 2012) the game:

"Is a free, spontaneous activity that embodies joy and fun and is shown in different forms: it can be individual in certain periods and collective in others; in a sense, for the child, it is a symbolic language through which he expresses himself (self-expression).

Cagigal, quoted in (Casado, 2016), defines it as: "free, spontaneous, disinterested and insignificant action that takes place in a temporal and spatial limitation of the habitual life, according to certain rules, established or improvised and whose informative element is the tension". And, finally, for Elkonin (Elkonin & Uribes, 1980):

"game is a variety of social practice consisting in reconstructing an activity that highlights its social content, human, its tasks and the norms of its social relations, to the margin of its real practical purpose".

All the mentioned definitions perceive the game as a happy, funny, free and spontaneous activity, but some focus on its more psychological part since they name self-expression and others, on its social part because they emphasize the effect it has on the social relations that are established. It is also necessary to emphasize the role of the norms or rules of the games since without them
they could not exist. Finally, one aspect these quotes do not mention is the typology of the game, something that we will study next, focusing on the kind of game we are most interested in to achieve our goal.

Another objective of this work is to present the current situation of the use of gamification techniques and/or elements related to play (game-based learning) applied to the teaching and learning of foreign languages, mainly English, in Primary Education. Therefore, we will identify and classify studies and didactic uses of gamification in this field to provide a useful tool for teachers and/or researchers interested in this subject.

This section aims to analyze different variables of the use of gamification and its variants in the context of teaching foreign languages. To achieve our purpose, we have divided this section into the following three points:

- Gamma and other applications other than language teaching
- Gamma gamification as an aid to increased motivation, and
- The use of gamma for the teaching of languages at higher ages.

The gamma in the teaching-learning of foreign languages in the stages of Infant and Primary Education

Learning a foreign language includes mastering their different skills and components. This is what Lareki explains (LARRAINZAR, 2014)

"One of the great objectives of teaching and learning a foreign language is the complete acquisition of the language. There is no doubt that the acquisition will be complete when all four skills are mastered (oral comprehension, written comprehension, oral expression, written expression and the ability to interact taking into account all the above skills). In short, to teach them how to use these words and grammatical expressions appropriately and fluently in everyday contexts and situations." (7)

(Lareki, 2014) goes on to argue that in order to acquire a language it is essential to decide on the methodology we are going to use, and in the case of the studies presented below, the authors used gamification and other related elements such as games and learning based on the play to achieve their objectives.
Gamification and motivation

As we mentioned before, one of the elements that are usually present in gamification is motivation. Moreover, it could be said that the fact of seeking, creating and developing another type of more dynamic learning strategies has as its main purpose to increase the motivation of the students to reach the acquisition of knowledge or skills in a more attractive way. Specifically, motivation is very important in the acquisition second languages, as Brown (Brown, 2007) states: "motivation is a star player in the cast of characters assigned to second language learning scenarios around the world”.

Gamification at higher levels

Of the 20 studies chosen, the use of online games was implemented through the “HOT POTATOES” platform with university students between the ages of 20 and 25. The most important thing about this study was that the result showed that the young people surveyed and researched accepted its effectiveness but did not use the games as often as expected because they felt uncomfortable using them. The following are some of the studies that focus on analyzing and demonstrating whether gambling positively helps the acquisition of both oral and written skills in a foreign language. The researcher (SEVY-BILOON, 2016) demonstrates in her study that games helped students to improve the use of the four basic skills of a foreign language, in this case, English, making learning more enjoyable. On the other hand, other authors focus only on some of them. For example, in the study of (Chia-Jung, Chen, & Huang, 2014) a secondary class was divided into three groups, one of which would learn English with digital games, another with board games and the last would follow the traditional teaching method. After several tests, it was found that the team that learned through digital games surpassed the rest in terms of the number of games they learned. Variables studied, oral skills, while encouraging them to use the English language to communicate with their peers.

Importance of the problem

Various studies work all the skills of the foreign language, such as oral expression, written expression, listening or oral comprehension and reading or writing comprehension. Among them, Juan and Conesa (Antonio & Conesa., 2013) emphasize that to teach a foreign language, you must
first give instructions in the mother tongue, especially when the children are very young. Also, use Total Physical Response games and explain the language that will be necessary to be able to play. Besides, they describe the role of the teacher as a watcher and observer who does not have to correct excessively and who must dissipate the doubts of his pupils. (Figueroa, 2015) on the other hand, states that the gamification of the EFL classroom helps to progress the learning of writing, reading and oral skills while motivating collaboration and interaction. (Derviş Kayımbaşıoğlu, 2016) concluded that teaching a language through the use of ICT and gamification significantly optimized English language acquisition, in particular. They also argued that ICT can reduce student distraction, thus increasing the learning curve. Something similar occurs in (Martínez, Moreno, Olivencia, & Terrón, 2016), who highlight ICT, augmented reality, gamma and mobile applications as very beneficial elements to be used in the foreign language class.

The use of gamma technology in education has five basic objectives: to motivate students, to increase the retention of learning and to improve the transfer of learning, because one learns something that is applied in the real context, in addition to obtaining knowledge and being instructed more quickly. The four psychological processes behind gamification are motivation, ability, flow and levers. Motivation refers to extrinsic and intrinsic incentive. Ability is the student's concept for performing an action. The flow is related to the emotional experience produced by the game and the levers are those small events that gamification does to guide the player to act (Fogg, 2009).

**Method**

To meet the objective of this study, mixed research was used and research was developed of an exploratory type. The proposed research involves 20 students who in a range of 20 to 25 years have been proposed to learn in a way different from the traditional English language as a foreign language. The first step was to take classes in the computer lab, open the HOT POTATOES platform, which should be mentioned, the information contained in it was updated every day; in addition to the fact that the evaluations were based on the use of online games, a source on which this research was based was: eslgamesplus.com, a platform where not only university students but also children can learn and if you want to apply it in adults, you could also, of course, the latter must know how to operate a computer.
The didactic proposals include; End of Degree Works, articles of review of studies and experimental studies with subjects. All of them have as object of study the analysis of gamification, learning based on play and games applied to the context of education. The main theme of most of the works is the application of gamma technology and foreign language learning, although others are also included that cover, in addition to this theme, variables such as motivation, gender, education in values, cooperative learning, ICT, or special education.

Information has been collected from various sources, including the following: databases such as ERIC (Educational Resources Information Center), the main source of reference bibliographic information in education sciences, or Science Direct, the journal Language Learning & Technology, the Dialnet portal, which compiles and allows access to documents published in Spain in any language, and the Google Academic search engine.

After the data collection, they were classified in an Excel table according to the procedure followed in the investigation, results, instruments used, subjects analyzed, teaching fields investigated, etc. Likewise, with all the data collected and analysed, a conceptual map has been drawn up which helps to visualise the different branches and aspects researched.

**Results**

Gamification has different components or essential elements, without which we would not be able to understand it. Table 1, taken from (Figueroa, 2015), names and explains some of them. These elements are points, badges, leaderboards, progression, performance charts, missions, levels, avatars, social elements and the reward system.

<table>
<thead>
<tr>
<th>Points</th>
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<td>Performance graph</td>
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<td>Quests</td>
<td>Some of the tasks players have to fulfill in a game.</td>
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<td>Levels</td>
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Table 1. The elements of the games and their definitions
In short, it can be said that game-based learning is a technique used in education to present theoretical content in the form of games or video games. This tool has three essential characteristics: learning takes place in a setting that is attractive to the user, it evolves by reaching different goals, and finally, the learning experience that is created has to be positive. When game-based learning is combined with simulation, these give rise to so-called serious games or formative games. The formative game is a type of game whose fundamental purpose differs from simple fun.

**Discussion**

When the person in charge of teaching applies gamification in the educational context, he generally uses this playful activity so that the student body learns through the organization and use of the rules of the game, thus helping the students to get involved in their learning by offering them a different way of learning. The game encourages effort and collaboration while rewarding them symbolically for the performance of established tasks, with points, levels or rankings. (Comenius, 2000) mentions how, throughout history, the play has been viewed by different methodological and pedagogical currents as an educational resource that is an important part of teaching and learning processes. Aristotle, Rousseau, Piaget and Dewey, who proposed play as a resource to support certain classroom activities, because of its intrinsic motivating qualities and because of its importance in the cognitive, motivational and social development in the active process that education represents, by incorporating many playful activities in preschool and school education, some of which are now also applied in adult education.

With the information mentioned above, it reinforces the fact that play, for a long time, has been a tool that included in the lessons generates an environment conducive to teaching and learning in an enjoyable, effective and productive way; that it is a dynamic activity in which the teacher becomes an important part of the teaching process and the teacher, the guide for learning through play by integrating merely playful elements.

Gamma/modification is a methodology that helps to facilitate and make more effective the classroom environment in our educational systems since with its implementation one learns while enjoying the activities planned for this effect. Among the advantages it offers to the student body are easy reprogramming of objectives, objectivity and a basis based on behavioral theories;
therefore, its results are measurable. Among the advantages mentioned, the applicability of the elements that make it up in real life, the improvement in concentration, the promotion of teamwork, adequate and timely feedback, and the improvement of a group and individual behaviors in class, among others, stand out. Thus, for (Csikszentmihalyi & Buchanan, 2008) designing student learning focused on the mechanics of gammatization requires the use of clear and achievable objectives, achievable tasks, concentration and focus, immediate feedback, a balance between skill level and challenge, and intrinsically rewarding activity. Gaming gives teachers the possibility to use game strategies with various learning contents and thus generate a correct result. This technique can also be used in different contexts to improve not only learning and retention but also the application of knowledge. It also works to stimulate collaboration between classmates and discussions. According to (Verdugo Peñaloza, 2008), the game is an ideal resource to be used in education, as it represents an effective tool that aims to achieve certain educational objectives, thus facilitating the transfer of content and contributing to the assimilation and meaningful understanding of learning. However, the game must be directed and facilitated by the teaching staff, who must guide this process, if teachers are to be able to identify with this activity the learning that is intended to be stimulated by its use.

**Conclusion**

Once the data from both the observations and the application of the HOT POTATOES platform had been analyzed, the information was tabulated. The following conclusions were drawn from this analysis:

The gamma mechanics contribute to improving the teaching of a foreign language since they increase the motivation of the students and their commitment to what they have learned.

The course program was presented as a game according to a model that complies with the components, mechanics and dynamics of the process. It was possible to motivate the study group to get involved in the different challenges and activities, both evaluative and of mere scope.

Gamification is an element that adds dynamics of cooperation, competition and feedback in the face-to-face English classes.

From the diverse challenges and the establishment of specific rules of competitiveness and cooperation among the subgroups and among the student body, mechanics were consolidated that, although it propitiated competition among the participants, also proved to be highly useful in
the achievement of individual goals. Incorporation of gamma components as badges, points, rankings and levels, among others, is a tool for students to gain recognition for their work. Demonstrated English language skills or knowledge. Every achievement, each level surpassed and each position in a ranking demonstrated the individual commitment to improving the level of language and, in a group way, the work that took place on the linguistic level to develop them.

The analysis carried out in this document reflects a positive trend in the use of gamma technology in foreign language learning. The results varied depending on the age studied or the language acquired, but one very important fact to comment on is that none of the studies, papers or articles analysed had negative results after the use of gamification or related techniques. Although many of the studies analyzed prove to be beneficial for learners, not all of them prove that the use of gamification has contributed to improving student learning.

Finally, the study is considered as a small first advance that could contribute to fight against the frustration that the students feel before the mistake and to diminish the rejection, the loss of motivation and the disinterest to learn foreign languages, since, we bet for teaching through amusing and motivating techniques. Besides, other authors will have the possibility of consulting this work for their future research. Finally, our study may serve as support for teachers who need more information about the didactic benefits of the use of gamma technology in the learning of foreign languages, mainly in Higher Education.

Anexos

| Table 1. The elements of the games and their definitions |
|---------------------------------|--------------------------|
| Points                          | Numeric accumulation based on certain activities. |
| Badges                          | Visual representation of achievements for the use. |
| Leaderboards                    | How the players are ranked based on success. |
| Progress bars/Progression       | Shows the status of a player. |
| Performance graph               | Shows player performance. |
| Quests                          | Some of the tasks players have to fulfill in a game. |
| Levels                          | A section or part of the game. |
| Avatars                         | Visual representation of a player or alter ego. |
| Social elements                 | Relationships with other user through the game. |
| Rewards/reward system           | System to motivate players that accomplish a quest. |
**Figure 1.** Principles and mechanisms of play-based learning (Perrotta, 2013)

**Referencias**


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References


Referências


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