

## Gamification with videogames in Spanish as Foreign Language Class: didactic proposal / *La gamificación con videojuegos en clase de ELE: propuesta didáctica*

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### ABSTRACT

The world of language teaching and acquisition, just like any other sector of society, is currently going through an adaptation process due to the appearance of the Internet and new technologies. The first goal of this article is to study the possibilities within a Spanish language class of one of the most emblematic objects of technological development: videogames. To achieve this, we will first examine the theoretical framework in which the concepts 'game', 'serious game', 'videogame' and 'gamification' are analyzed and later present examples of videogames that are being used increasingly often in the classroom. The second objective, which concludes the article, is the elaboration of a gamified educational proposal consistent with the creation of an in-class digital gamebook using user-friendly and easy access software.

**KEYWORDS:** Gamification; Videogames; Spanish as a foreign language; Educational proposal; Digital gamebook.

### RESUMEN

*El mundo de la enseñanza de idiomas, como cualquier otro sector de la sociedad, se encuentra en un punto de adaptación a la irrupción de internet y las nuevas tecnologías. El presente artículo tiene como primer objetivo estudiar las posibilidades en el aula de Español como Lengua Extranjera (ELE) de uno de los objetos emblema del desarrollo tecnológico actual: los videojuegos. Para ello, se parte del estudio de un marco teórico en el que se analizan los conceptos de 'juego', 'videojuego', 'serious game' y 'gamificación', su importancia en la sociedad actual, y se aportan ejemplos de videojuegos cuyo uso en el aula es cada vez más habitual. El segundo objetivo, y con el que se concluye el artículo, es la elaboración de una propuesta de actividad didáctica gamificada consistente en la creación en el aula de un librojuego digital mediante el uso de programas de sencillo uso y fácil acceso.*

**PALABRAS CLAVE:** Gamificación; Videojuegos; Español como lengua extranjera; Propuesta didáctica; Librojuego digital.

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## 1 Introduction

Video games have become one of the symbols of current technological development, as few sectors evolve at such a rapid pace and enjoy such robust health. Over the years, what was born as purely recreational has gained significance in society and is beginning to be valued as a cultural object and a vehicle for artistic expression. Video games have grown in complexity, transitioning from a mere pastime to becoming an art, a sport, a method for storytelling, and, of course, another tool to be utilized in educational processes.

Changes in classroom teaching have also deeply transformed over the past decades. Computers and tablets are gradually taking the place of pencils and notebooks in the classroom. What a few years ago was limited to an hour in the technology and computer class is slowly becoming the norm in any subject, forcing a reformulation of the concept of teaching. The constant technological advancement has compelled all sectors of society to update themselves, including the field of education. Teachers today must not only possess the necessary knowledge in their respective fields but also be skilled in handling different programs and applications for teaching. The importance of staying updated as an education professional has been highlighted during the recent crisis caused by the COVID pandemic: due to the inability to attend educational institutions, remote teaching has ceased to be an option and turned into an obligation. Within this online education framework, video games can be an additional tool to harness in order to facilitate and enhance learning. Therefore, the objective of this article is to demonstrate how gamification can be achieved by incorporating video games in classrooms or utilizing the available technology to propose small games. Since analyzing all the possibilities offered by video games as a means to facilitate teaching and the acquisition of a second language seems boundless, this current work aims to be an approach and starting point for engaging in such an immersive experience. Therefore, in the present study, a methodological approach has been followed that can be divided into two parts. Initially, research has been conducted to justify gamification with video games, divided into three sections that address the concepts of playing, video games, and gamification. Subsequently, a second part has been carried out in which examples of video games with possibilities in the classroom are shown, along with a proposal for gamification applicable in Spanish as a Foreign Language (ELE) class: the creation of a gamebook.

The theoretical framework of the article focuses on the study of different authors and articles in an attempt to address the following questions:

1. What is the importance of play in learning?
2. What is a video game, and what is its relevance today?
3. What is gamification?

To address the first question, the approach begins by exploring how humans have always used play for learning or as a practice for adulthood. Subsequently, a key element in learning processes closely related to play and entertainment is discussed: motivation. After analyzing the importance of play for learning, the second point of study is to justify the use of video games in the context of education. Video games, in just a few decades, have evolved from being synonymous with leisure to becoming one of the most successful industries today, with a significant impact on various sectors of society. With the theoretical framework established regarding education and video games, the study delves into the concept of gamification and analyzes the typical elements used to gamify content.

However, the main focus will be on the development of an educational proposal based on the creation of a narrative video game in the classroom, specifically a small interactive book-based game (gamebook). Through this, students will have the opportunity to apply various communication skills such as reading comprehension and written expression. The educational proposal will encompass all the necessary elements for its subsequent implementation in any ELE classroom.

## **2 Theoretical Framework**

### *2.1 The Importance of Play in Learning*

In order to explore the use of video games in gamification, we must start with the foundation: play. As Flavio Escribano (2020, p. 20) aptly puts it, "Antes de que los seres humanos comenzáramos a desarrollar nuestra cultura, ya existía el juego en este viejo planeta." This is evident in the discovery of Paleolithic and Neolithic objects that have turned out to be children's toys. For instance, broken spearheads have been unearthed, believed to have been given to

children for play. This practice can be understood as a form of preparation for adulthood: they played with the tools they would later use for survival (Escribano, 2020, p. 22).

In the year 2021, the Olympic Games took place, a tradition dating back to the 8th century BC. The significance of play, even in ancient times, was so great that ongoing wars would be suspended to ensure athletes could compete. The fact that a tradition spanning over 2000 years, centered purely on play and competition, remains one of the most anticipated and media-covered events today is a strong testament to the importance of play for humanity. Chess is another timeless game that has accompanied significant historical figures like Charlemagne or Alfonso X the Wise, and continues to be a subject of study for mathematicians and scientists.

The role of play in society has always been much more than a simple pastime or method of entertainment. We also have cases of pivotal games in wars, such as the famous *Kriegsspiel*, a tabletop war game created in the 19th century by the Prussian army. It aimed to teach tactics and simulate potential outcomes of specific battlefield scenarios.

In summary, play has been a constant in the development of humanity, and now more than ever, thanks to the evolution of society. We have more leisure time, and the possibilities for entertainment have multiplied. Video games are nothing but the latest evolution of something that existed even before we developed culture.

## *2.2 Motivation in the Learning Process*

The main factor that makes the game an excellent tool for learning is its ability to increase motivation in students. "La motivación representa qué es lo que originariamente determina que una persona inicie una acción (activación), se desplace hacia un objetivo (dirección) y persista en sus tentativas para alcanzarlo (mantenimiento)" (Herrera, et al, 2004, p.2). In other words, a motivated student learning a language will have a greater predisposition for knowledge acquisition (activation), will exert more effort to obtain it (direction), and will persist in their goal (maintenance), resulting in greater ease of learning compared to a demotivated student.

In the field of education, a distinction is often made between intrinsic and extrinsic motivation. Anna María Ajello (2003) defines intrinsic motivation as those activities and actions that a person undertakes for enjoyment, regardless of whether they receive recognition or not. Extrinsic motivation, on the other hand, occurs when a person engages in an activity for instrumental reasons

or external motives, such as a reward. Applying this to the academic context, intrinsic motivation in a student would refer to curiosity, the desire to learn, self-imposed challenges, and the aspiration for growth and self-improvement. On the other hand, we find extrinsic motivation in classroom dynamics: the desire to achieve a good grade, to have a better academic record than a peer, or to avoid punishment for not completing a task.

Motivation is not a stable feeling; rather, it can increase or decrease over time, and the teacher plays a significant role in this aspect. One factor that determines motivation is the difficulty or challenge that individuals encounter during the learning process. A teacher who does not consistently calibrate the difficulty of tasks during the learning process not only fails to promote motivation but can also significantly worsen the educational process:

Quando sus habilidades [de las personas] son altas, pero las actividades no son desafiantes, el resultado es el aburrimiento. Cuando el desafío y los niveles de habilidad son bajos, se experimenta apatía y cuando se enfrenta una tarea desafiante para la que no se cree tener las habilidades necesarias, se experimenta ansiedad. (Pereira Naranjo, 2009, p.166)

Similarly, intrinsic motivation can increase if learning takes place in an environment infused with extrinsic motivation. The use of games in the classroom is one of the primary tools for boosting motivation. A well-designed game has a final objective and presents a set of rules that students must follow. Thanks to the constant feedback participants receive during a well-structured game, the interest in reaching the final objective does not wane if the challenge aligns with the participants' capabilities. In her book *Reality is Broken* (2011), McGonigal, a key figure in gamification and video game studies, states the following about motivation and games:

In a good computer or video game you're always playing on the very edge of your skill level, always on the brink of falling off. When you do fall off, you feel the urge to climb back on. That's because there is virtually nothing as engaging as this state of working at the very limits of your ability (McGonigal, 2011, p.24)

In essence, games, particularly video games, allow students to operate at the edge of their capabilities, a situation that not only increases motivation but also leads to a state that McGonigal defines as "flow": "When you are in a state of flow, you want to stay there: both quitting and winning are equally unsatisfying outcomes." (McGonigal, 2011, p.24). The ideal goal of a class would be to guide students to reach this state, where they are so engaged in a particular task that nothing

happening around them seems to matter; a state where the process holds more value for the individual than the end result. We have all experienced the state of flow at some point in our lives: during a sports competition, a concert, an exam, and, of course, while reading a good book or playing an especially captivating video game. Through games, including video games, we can attempt to emulate this sensation during the learning process.

### *2.3 The video game*

While numerous definitions of the term "game" have been offered, such as Kapp's (2011, Paragraph 1), "A game is a system in which players engage in an abstract challenge, defined by rules, interactivity and feedback that results in a quantifiable outcome often eliciting an emotional reaction," few have addressed the concept of the video game in light of its evolution throughout history. Among those elaborated, Gil Juárez & Vida Mombiela indicate that "los videojuegos son programas informáticos diseñados para el entretenimiento y la diversión que se pueden utilizar a través de varios soportes como las videoconsolas, los ordenadores o teléfonos móviles" (2007, p. 11). This definition portrays the video game as an object designed for entertainment and enjoyment, a simplistic conception of what it is today. However, it points out the defining feature of requiring technological platforms to play. A definition more attuned to the artistic possibilities of the video game is proposed by Aarseth:

Estos juegos, a diferencia de los juegos o deportes tradicionales, están formados por contenido artístico no efímero (palabras, sonidos e imágenes almacenados), que los acercan mucho más al objeto ideal de las humanidades, la obra de arte. Así, se vuelven visibles y comprensibles desde un punto de vista textual para el observador estético, de un modo en que fenómenos anteriores no lo eran. (Aarseth, 2007, p.5)

However, both definitions omit what I consider to be the most important and defining trait of a video game: interaction. Unlike other entertainment systems or art forms where the recipient is passive and only requires cognitive effort to understand the message, such as reading a book or watching a movie, in a video game, the recipient must interact to progress. This interaction is commonly defined as gameplay:

The gameplay is the component of computer games that is found in no other art form: interactivity. A game's gameplay is the degree and nature of the interactivity that the game includes, i.e., how players are able to interact with the game-world and how that game-world reacts to the choices players make. (Rouse, 2005, p. 20)

Interaction is thus necessary, regardless of the degree. For instance, in text-based adventures or gamebooks, the player is limited to reading a story and making decisions about what will happen next at certain points. However, in today's context, the frequently seen video games offer complete interaction from the player's side: we decide where the character will go, where they will look, and what they will do at every moment. As a synthesis, I propose my own definition of a video game: an electronic game created with various purposes (entertainment, competition, artistic, educational, etc.), developed using computer programs, requiring a platform and a screen for execution, and demanding interaction from the recipient to progress through the story and discover its mechanics.

#### *2.4 The video game in the present*

The video game industry has experienced exponential growth in recent years. In 2013, it was estimated that 1.2 billion<sup>1</sup> people were gamers (de Heij et al, 2013), a number that has risen to nearly 3 billion people in 2021 (Newzoo, 2021), and the projection is for this number to continue growing. Even in Spain, a relatively small country, the video game market holds significant presence: in 2020, it generated a revenue of 1.747 billion euros, according to data from the 2020 annual report by the Spanish Association of Video Games (AEVI).

Equally noteworthy alongside the statistics associated with the video game industry is its new "status" within society. For many years, video games were viewed and studied as a product that, far from being a cultural object, posed problems for young people. In a 2003 study, four points were summarized as the perceived dangers of video games:

1. Restan tiempo al estudio y otras actividades educativas y de ocio.
2. Favorecen conductas agresivas.
3. Limitan el desarrollo de habilidades sociales y la fantasía.

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<sup>1</sup> 1.2 billion people. The term "billion" is used with the American connotation, meaning 1 billion would be equivalent to one thousand million.

4. Favorecen el consumo y gasto de dinero  
(León Jariego & López López, 2003, p.1)

Without a doubt, the primary issue that video games have faced is the notion of a correlation between playing video games and aggressive behaviors. It's undeniable that many video games include violent, and even extremely violent, actions within their mechanics. However, similar to film or literature, these mediums can also portray stories rich in violence and aggression. Numerous studies refute the idea that video games are the cause of violent behaviors. For instance, León Jariego & López López (2003) and Gros Salvat (2000) assert that a clear and empirical demonstration of games causing aggression has not been established.

Regarding addiction, another recurring topic when discussing video game issues, there has also been much debate. The World Health Organization (WHO) has included video game addiction, referred to as 'gaming disorder,' in its ICD-11 (International Classification of Diseases), categorizing the disorder into two types: online gaming and offline gaming (World Health Organization, 2019). This decision has not been without controversy and has sparked protests and discussions arguing that there is limited clarity on what exactly constitutes video game addiction, and that the decision is based on weak empirical and scientific foundations (Van Rooij et al, 2018).

It's evident that there is now a strong response not only from players but also from scholars, educators, and professionals concerning some of the issues often associated with video games. Returning to the initial premise, the 'status' of video games is undergoing a transformation and is no longer simply a mode of entertainment. A movement is gaining momentum that asserts video games as a new form of art and a cultural object, serving as a significant medium for conveying stories and emotions.

Los videojuegos pueden ser considerados como una nueva forma de expresión artística en las últimas décadas, pero al igual que ocurre con las expresiones artísticas contemporáneas, la sociedad todavía no es capaz de asimilarlas y "hacerlas suyas" (...) Los videojuegos son un conjunto de todas estas "artes" (literatura, cine, música); existe el aspecto gráfico, una historia, una música, y sobre todo, el aspecto lúdico y de jugabilidad. (Belli & López Reventós, 2008, p.161)

In essence, video games have transitioned from being a matter of pure entertainment to becoming one of the most extensive and robust industries of our time. The realm of education is not unaffected by the innovations in the video game industry, and as we will see in the following

section, it is increasingly common to find educators incorporating *Serious Games* into their lessons, applications designed to enhance motivation or adopting typical video game dynamics, a concept known as gamification.

## 2.5 Gamifying education

### 2.5.1 Serious Games

The concept of Serious Games, used to categorize video games that serve a purpose beyond mere recreation, has gained significance in recent times. However, its origins precede the commercial video game era. In 1970, two years before the release of Pong, Clark Abt published his book "Serious Games," in which he defined this concept:

We are concerned with serious games in the sense that these games have an explicit and carefully thought-out educational purpose and are not intended to be played primarily for amusement. This does not mean that serious games are not, or should not be, entertaining. (C. Abt, 1987, p. 9)

Dr. Clark Abt's book primarily referred to 'classic' games, although nowadays, the concept is commonly used to refer to video games. Moreover, in general terms, the most popular definition of Serious Games is as follows: "games that do not have entertainment, enjoyment, or fun as their primary purpose" (Michael & Sande, 2006). Interestingly, even though the concept is trendy today, the first video games in history would fit perfectly into this definition since, as we have seen, some were created to test computers or analyze various war strategies, such as *OXO*.

Currently, and for the scope of this article, Serious Games interest us due to their potential and applications in the field of education. However, many other domains harness the possibilities of a video game for a different purpose. For instance, Formula 1 drivers use highly realistic simulators to practice and learn different tracks. Another example would be numerous instances of video games created for advertising purposes. Similarly, we find games designed for political, military, ecological, health-related purposes, and more.

### 2.5.2 Gamification

Inevitably, the concepts of Serious Games and gamification tend to be intertwined and confused. The concept of gamification is complex to define. Firstly, it doesn't have an entry in the Real Academia Española (RAE), so the most basic definition can be found in the Oxford dictionary: "the use of elements of game-playing in another activity, usually to make that activity more interesting" (Oxford University Press, 2021).

Another definition along the same lines is provided by Kapp: "Gamification is using game-based mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems" (Kapp, 2012). After analyzing numerous definitions of gamification, Flavio Escribano, in his book *Homo Alien* proposes a more complex and comprehensive definition: "La gamificación es la forma que tenemos de medir la capacidad que tiene el juego como uno de los artefactos de simulación y simulacro más importantes para ayudarnos a entender, alterar, evolucionar y enriquecer nuestra cultura" (Escribano, 2020, p. 107).

The primary difference, therefore, between Serious Games and gamification is that the former are complete (video) games with purposes other than entertainment, while gamification employs elements and dynamics from games and video games to be applied in other fields. Jane McGonigal, in her book *Reality is Broken* (2011, p. 128), accurately explains why Serious Games don't quite fit well in education and why gamification should be aimed for. According to her, all educational games might provide a relief for students at times but only work on an occasional basis. What she finds interesting and, in her words, game-changing, is not using games in school but transforming the entire school into a game, gamifying everything from the smallest tasks to the most significant assessments. This proposal to turn the school into a video game and gamify the entire educational system might seem utopian, but it's easy to agree with her on the shortcomings of Serious Games: they are products that don't necessarily require an educational context to function; they are designed for informal teaching, outside of the classroom.

On the other hand, Kapp, on his website, categorizes types of gamification: structural gamification, on one hand, is defined as applying game mechanics without altering the content of the activity itself. For example, giving students points or rewards based on the number of tasks they complete during a class. On the other hand, there's content gamification, which involves applying game mechanics to the actual content of the exercise or task, altering its nature (Kapp, 2013). Both types of gamification, structural and content, are perfectly applicable in a classroom setting, whether for language instruction or any other subject. They can even be combined in a single activity, as I illustrate in the proposed didactic of a narrative video game. Structural

gamification can be easily applied as it doesn't require content modification, and point systems can be established around various activities.

The elements that can be used for gamification in a classroom, both in terms of structure and content, are numerous. Drawing from various sources like Roganti (2014), Abela (2020), Escribano (2020), McGonigal (2011), and Kapp (2013), we can identify that the basic resources used for gamification are:

- Points: Represent the participants' progress and are useful for providing real-time feedback.
- Badges / Achievements: Special rewards granted when a specific task is successfully completed or a challenge is achieved.
- Levels: Indicate a student's progress. It can be related to the point system: to reach a certain level, a specific amount of points is needed, enabling them to tackle a particular challenge.
- Challenges: An objective or mission to be completed.
- Leaderboards: Rankings that allow participants to compare their results with other players. They aim to motivate through competition, although it's not always effective as not all players may have the same desire for competition.
- Storytelling System: Modern video games often feature complex narratives; this can be controlledly integrated into a classroom to enhance motivation.

These elements (and any other typical of a game: graphical environment, final bosses, experience systems, power-ups, competition systems, skill-enhancing items, player alliances, etc.) can be used individually or combined. They can also be employed without the need for new technologies or by leveraging existing video games or applications that facilitate their implementation in the classroom. Of course, the teacher should have conducted prior research and preparation to ensure these elements fit seamlessly with the content or skills they intend to teach.

At this point, it's worth mentioning that not all activities that incorporate the aforementioned elements are necessarily games or video games. These are characteristic elements of video games, but as stated by McGonigal (2011, p. 21), "they are not defining features." McGonigal identifies the four elements that all games share: goal, rules, feedback system, and voluntary participation.

The goal is the specific outcome that players will work to achieve. It focuses their attention and continually orients their participation throughout the game. The goal provides players with a sense of purpose.

The rules place limitations on how players can achieve the goal. By removing or limiting the obvious ways of getting to the goal, the rules push players to explore previously uncharted possibility spaces. They unleash creativity and foster strategic thinking.

The feedback system tells players how close they are to achieving the goal. It can take the form of points, levels, a score, or a progress bar. (...) Real-time feedback serves as a promise to the players that the goal is definitely achievable, and it provides motivation to keep playing.

Finally, voluntary participation requires that everyone who is playing the game knowingly and willingly accepts the goal, the rules, and the feedback. (...) The freedom to enter or leave a game at will ensures that intentionally stressful and challenging work is experienced as safe and pleasurable activity. (McGonigal, 2011, p. 21)

Following these guidelines is how, according to McGonigal, an environment conducive to gamification, whether classic or with video games, is generated. The first three elements highlighted by McGonigal are plausible and can be prepared, but voluntary participation is impossible to foresee. Once we fulfill these four requirements, we can then incorporate any video game element or dynamic: points, graphical environment, levels, combat mechanics, etc.

### *2.5.3 Examples of gamification with video games in ELE classes*

Up until now, we've discussed the possibilities of gamification in the classroom, which doesn't necessarily involve using video games. Employing video games—or parts thereof—as gamification tools offers an advantage over more traditional gamification: usually, the video games we can apply in the classroom already include scoring systems, achievements, feedback, levels, a storyline, and other elements, thus saving the teacher time in structuring lessons. On the flip side, there are not insignificant challenges: the necessary materials might not always be available in the classroom, and the video game might not align with the content, which is a common occurrence in ELE classrooms.

Currently, there are various projects that blend video games with ELE instruction, and there appears to be a preference for creating virtual environments. A highly studied case from about a decade ago was the now-defunct video game *Lost in la Mancha*, which was based on a virtual world created for learning Spanish:

Lost in La Mancha permite la inmersión total de los jugadores (nuestros alumnos) en un ambiente de aprendizaje inmersivo del español. Lost in la Mancha representa una forma de aprender la lengua española totalmente distinta a los métodos tradicionales existentes en la actualidad. A través de un videojuego totalmente interactivo que se desarrolla dentro de un entorno inmersivo, el protagonista "Collin" debe adquirir el conocimiento necesario del español para sobrevivir en un remoto pueblo de La Mancha. (Maniega Legarda, Yànez Vilanova, & Lara Navarra, 2011, p.113)

This game aimed to teach the equivalent content of the A1 level of Spanish established by the Common European Framework of Reference and followed the Curriculum Plan of the Cervantes Institute. Therefore, it was a Serious Game, as the entire game was designed for Spanish language instruction and didn't require an academic context for its use. Currently, it's easy to find studies on the phenomenon of *Lost in la Mancha*; however, there is no trace of the game, indicating that it wasn't very successful.

While such initiatives are interesting and undoubtedly potentially useful in ELE classes, we believe that they are unlikely to become a standard in the market or educational environment. Firstly, because they are not visually appealing enough, and consequently, they won't capture students' attention. Secondly, there's already a globally recognized reference video game that can be gamified or used as a Serious Game to teach various types of content: *Minecraft*.

*Minecraft*, developed by Mojang Studios, was first released in 2009 and is an open-world sandbox video game. In other words, players have complete freedom to interact with the environment, make decisions about what to do, and move around without being confined to a specific path. *Minecraft* features a world divided into blocks that represent various elements of the game: trees, rocks, mountains, animals, etc. The success of the game is overwhelming: *Minecraft* is the best-selling game in history, with over 200 million copies sold, and despite being over 12 years old, it continues to be popular. Among the many existing variations of *Minecraft*, there's the *Minecraft Education Edition* project, which is the most famous virtual environment in gaming history, focused on gamification and education. This version of *Minecraft* is increasingly prevalent in various educational institutions, primarily because, unlike other video games or virtual environments, students don't need an adaptation process as they're already familiar with the game. Furthermore, the platform itself provides a vast amount of prepared content that can be applied in the classroom, categorized by subjects and varying levels of difficulty.

The preference for virtual environments is understandable in gamifying ELE classes, as we can communicate in real-time in the desired language. However, there are many more video game possibilities suitable for education. One of the most well-known and widely used in ELE classes is *Kahoot*. Developed in 2012, it's a game-based application that involves creating questions similar to those in a trivia game for educational purposes. Teachers can create various types of quizzes, including audiovisual material, which students answer in real-time, either individually or in teams. The gamification aspect is comprehensive, as *Kahoot* includes a point system that rewards students based on their performance, valuing both the speed of their responses and their streaks of correct answers. Its main limitation in language education is that it's challenging to align with skill-based teaching, as it's a game where students are limited to answering questions.

*Kahoot* might not be highly innovative in terms of mechanics, but it has marked the first step into the world of gamifying education for many teachers. Its user-friendliness, both for students and teachers, has made it a favorite pastime for many students in the classroom and has opened up numerous possibilities for educators.

### 3 Gamebook video games in ELE Classes

One of the challenges of gamification with video games is its complexity when it comes to implementation in the classroom. While traditional gamification can be easily executed with minimal materials and only requires a touch of creativity from the teacher—for instance, incorporating a point system and competitive mechanics into activities—achieving the same using the tools provided by new technologies isn't as straightforward. Without programming knowledge to design custom applications for the classroom, the common practice is to turn to existing video games like *Minecraft* or *Kahoot*, which often requires the teacher to adapt their approach to fit the program, rather than the other way around. However, modern technologies offer a wide range of easily accessible programs that, with a touch of creative effort, can be gamified in ELE classes to enhance the teaching process.

This small gamified proposal stems from a challenge we've encountered in our ELE courses: the need for creative and engaging activities that focus on enhancing the skill of written

expression. This proficiency tends to be the most complex for students, and beyond seeking topics of interest and varying text types, the originality and diversity of activities often remain minimal. Textbooks or course materials also rarely offer solutions to this problem, providing the same types of exercises repeatedly. Therefore, the objective is to provide teachers with a writing-focused activity that is stimulating and challenging for students, while also being useful. This activity can be introduced as both a one-time exercise and as a summative evaluation task.

### *3.1 Interactive fiction and gamebook*

Before delving into describing the activity, it's advisable to allocate some space to define the type of video game addressed in the teaching proposal, as these text-focused game scenarios can at times be challenging to categorize. In this case, a reasonable question might arise between interactive fiction and gamebooks. According to GamerDic, interactive fiction is defined as:

Subgénero de la aventura, donde toda la trama y las situaciones que debe superar el jugador se describen de manera textual, en ocasiones con alguna imagen muy simple, y donde todas las interacciones se realizan mediante comandos de texto usando lenguaje natural. (GamerDic, 2013)

In other words, it's a type of video game where text predominates, and the player's main action involves typing short commands or making minor decisions to progress. Therefore, our teaching proposal doesn't align precisely with the description of interactive fiction, as the reader won't be typing any commands but will instead be making decisions based on a set of predetermined options. Depending on the complexity we aim for within the text, the subgenre it most closely resembles is that of a gamebook or interactive book.

A gamebook is a literary work that involves the reader in the unfolding of events by requiring them to make decisions at certain key points. These decisions often involve reading the text in a specific order, skipping certain chapters, or making a choice about what will happen next. Once again, this textual format is neither of recent creation nor exclusive to video games, as several writers have attempted to engage readers in the story, with Julio Cortázar's *Rayuela* (1963) being the most recognized example. This novel, divided into 155 chapters, can be read in various ways: the basic option is to read it like any other book, but we can also choose to skip many chapters or

even follow a sequence proposed by the author. Despite having the same text, the reader's decision significantly influences their reading experience.

We also have the famous *Choose Your Own Adventure* books, published between 1979 and 1998 by Bantam Books: while reading, we have to make decisions, and depending on our choices, the book guides us to different pages. However, the limitation of these literary proposals was their medium—the book itself. No matter how creative the author was, there were inherent limits that were difficult to overcome. Beyond offering different reading styles, as Cortázar did, proposing different stories was impossible because the text always remained the same. The reading experience might change, but the text remained constant. Nevertheless, with the advent of new technologies, the possibilities of gamebooks increased. Now, it's possible to write books that offer dozens of completely different experiences, hidden endings, and even present us with small puzzles and riddles.

#### 4. Didactic proposal

The didactic proposal involves creating a small gamebook video game in which students write a story where the reader can choose the course of events. Using a very simple tool like *Google Forms*, it's possible to develop a complex text that includes an extensive decision tree for the reader to navigate. As we'll see, the possibilities are numerous, ranging from constructing a linear story where we simply decide what happens next, to crafting intricate narratives that lead us down the same path more than once, requiring us to solve small puzzles.

Gamification is present in both of its typologies, following Kapp's classification. On one hand, there's gamification of content, as you create an interactive adventure that simulates a video game that students will later have to play. On the other hand, there's structural gamification, since students will have to evaluate and score each other to determine which interactive adventure is the best (Kapp, 2013).

The sheet of the didactic proposal is as follows:

Title: <i>Creating Our Interactive Storybook</i>	
Level:	Minimum B2 level of Spanish.

<b>Duration:</b>	8 hours divided into 5 sessions of 2 hours each.	
<b>Objectives:</b>	<ul style="list-style-type: none"> <li>- Writing of texts</li> <li>- Use of acquired grammar skills</li> <li>- Formal evaluation of writing abilities</li> </ul>	
<b>Skills:</b>	<ul style="list-style-type: none"> <li>- Written comprehension</li> <li>- Written expression</li> </ul>	
<b>Functional, grammatical and lexical content:</b>	<ul style="list-style-type: none"> <li>- General use of previously acquired grammar</li> <li>- Discourse connectors and markers</li> <li>- Lexicon related to objects, parts of the house and emotions</li> </ul>	
<b>Methodology:</b>	<ul style="list-style-type: none"> <li>- Individual, in pairs or in groups</li> </ul>	
<b>Materials and resources:</b>	<ul style="list-style-type: none"> <li>- A computer with internet access</li> <li>- Access to the <i>Google Form</i> platform</li> <li>- Optional: Imagine editing software</li> </ul>	
<b>Sequence:</b>	- Session 1	- Reading of a sample interactive storybook and initiation of story construction
	- Session 2	- Creation of the outline with decision-making branches
	- Sessions 3-4	- Writing the text - Design of graphic elements (optional)
	- Session 5	- Playing through different story options - Final voting
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>- Task designed to formally assess students' writing ability</li> <li>- Evaluation rubric considering grammatical, lexical aspects as well as creativity and originality</li> <li>- Student self-evaluation</li> </ul>	

#### 4.1 Activity Preparation: Student Profile, Content, Dynamics, Material, and Objectives

Given that the primary focus of the activity will be on written expression and the substantial volume of text that students will need to write, the minimum required level is B2, as they will need to employ a wide range of grammatical structures and verb tenses. This activity is also suitable for C1 and C2 levels.

It's a lengthy activity that spans several sessions, although it can be planned as a blended classroom and independent work activity from home. The only sessions that should be conducted in-person are the first and the last, though it's ideal to work in the classroom to address specific grammar and vocabulary queries that may arise.

It's worth noting that this activity is designed to be included as a method of summative assessment for students' written expression skills. This is driven by two reasons: firstly, due to its complexity and duration, students will be required to demonstrate a comprehensive use of written Spanish. Secondly, it's an activity focused on written expression that doesn't involve acquiring new knowledge, but rather putting already acquired skills into practice. Exercises related to vocabulary, grammar, or discourse markers can be structured around the activity. However, the core objective is to practice Spanish writing. As teachers, the goal of proposing this activity is to assess students' ability to express themselves in writing using different verb tenses, vocabulary (which can be chosen to specify the theme of the story), and various discourse markers. Despite being a game, students will need to pay careful attention to the structure and composition of the text. As a secondary skill, students will practice reading comprehension as they read (and play) their classmates' stories.

Depending on the level and number of students, the activity can be done individually, in pairs, or in groups. Since in the final session, everyone needs to play all the interactive stories, it's ideal to structure the class in a way that requires reading a maximum of 4-5 texts. Given the complexity of the exercise, it's recommended to avoid individual work, except for students at very high levels (C1-C2). In lower levels, working in pairs or groups can involve dividing the texts to avoid an excessively long and complex activity.

The necessary material for the activity is a computer or tablet with internet access and access to the *Google Forms* program. This program is primarily used for creating forms, surveys, or questionnaires, but in this case, it will serve as the platform for creating the interactive story due to its user-friendliness. There are applications and programs available for creating more sophisticated gamebooks and interactive stories than *Google Forms*, but this software, besides being simple, is accessible to anyone with a *Gmail* account, and no additional software installation is required. As a drawback, the final appearance might not be as elegant as it could be with a specialized application. However, when gamifying with students, it's important to prioritize user-friendliness. Lastly, it's necessary to mention that the intention of this didactic proposal isn't to invent a new way of creating interactive stories but rather to demonstrate how gamification can also be achieved using widely known programs to create small video games, and how to implement them in the ELE classroom.

#### *4.2 Class sequencing*

#### 4.2.1 Session 1: Reading and topic selection

The first session involves introducing the students to the type of exercise they will have to create. Already divided into groups as deemed appropriate, we will send them a sample gamebook created using *Google Forms*:

[Link to the sample gamebook](#)

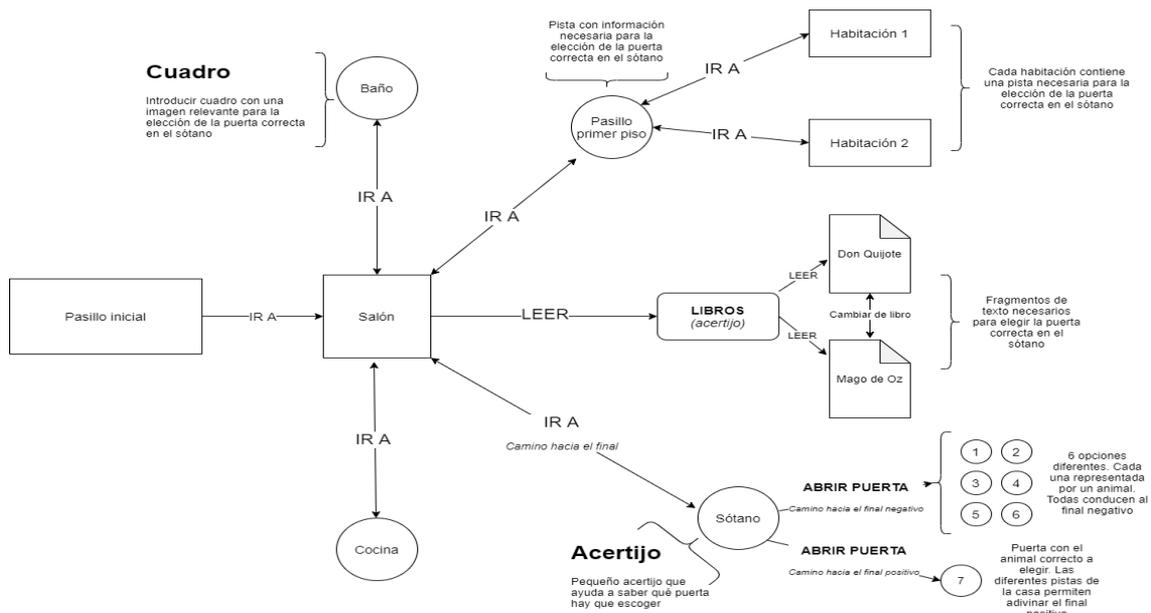
They will be instructed to read it and complete the adventure while attempting to solve the final puzzle. This way, as they practice their written comprehension, they become familiar with the game type and quickly grasp the activity's mechanics. After completing the text and engaging in a discussion to share ideas and impressions, they will be informed that they need to construct a similar story.

In this first session, students won't need to use *Google Forms* yet; we'll simply initiate the planning of the activity. Prior to starting the activity, the teacher will have chosen a theme and set of conditions—both in terms of storyline and content—that the students will have to work with. Allowing students the possibility to come up with any type of story can be problematic and lead to confusion; it's better to define and propose a context that resembles the content covered in class, encouraging them to apply the acquired vocabulary. We can also establish rules based on the grammar we want students to use: instructing them to write a story in the past tense, for instance, as it facilitates the reader's immersion in the adventure. For example, a drama written with dialogues, or even using the second-person narrative style, which is very suitable for this type of text.

Once the students are informed about the conditions they need to follow, we can invite them to start planning the storyline.

#### 4.2.2 Session 2: Developing the plot and conceptual outline

In this second session, students should already have a precise idea of the plot they want to convey. It's time to solidify and create a chart with all the decisions that the player/reader will be able to make throughout the story. Without imposing any type of limit, it's advisable to encourage students not to overly branch out the story and to establish only a few moments of decision-making, but with significant impact.



**Illustration 1.** Conceptual outline of the sample gamebook

Their task in this second session will be to present a chart or conceptual outline with all the decisions and possibilities that the plot will have. This way, when the time comes to write each page, they will have a clear path to follow. To facilitate the task, you can show the decision tree (Illustration 1) of the sample story they played in session I.

#### 4.2.3 Sessions 3-4: Writing the story

The session should start with a brief demonstration of how to use *Google Forms*. It's relatively simple: each section is equivalent to a page that the reader will have to go through. We add the possibility of answering a question in each section, which will serve as the list of decisions. By activating the option 'Go to section based on answer,' we can decide which page or section the program will take us to based on what we select while reading. To facilitate the connection between sections, it's best to name each page with a label that won't lead to confusion.

Once the students have understood how *Google Forms* works and we've given approval to the decision tree of each group, they can start writing the story. It's advisable to set a minimum and maximum word count for each page in the *Google Forms* document: between 200 and 400 words would be appropriate. This might seem small for a single page, but the cumulative effect of everything they write will result in a text of considerable length. The writing of the text can vary in duration depending on the objectives we aim to achieve. In our case, we consider two sessions of two hours each to be an appropriate timeframe to keep the task engaging and prevent it from becoming repetitive and tedious.

As a final aspect, though of lesser importance and potentially evaluated in the assessment rubric, is the visual presentation of the story. *Google Forms* has an interface that deviates from the ideal format for a book-based game, but it does allow the inclusion of images to illustrate different sections. Far from being trivial, a bit of creativity can make these images important elements in the development of the story. We can encourage them to create or use their own images, or to utilize existing ones.

#### 4.2.4 Session 5: *Playing and peer evaluation*

The final session, or the game session, will be the testing phase for the different stories. The teacher will share the various interactive books with all the students, taking care not to reveal the author of each one to ensure that subsequent voting remains as anonymous as possible. Afterwards, one by one, the students will play/read the different stories created by their peers, attempting to reach a positive outcome — as multiple endings can be included, of which only one is correct, a characteristic feature of interactive books and narrative video games. After completing each story, the students will fill out a small evaluation table to assess their classmates' creations:

TITLE:	
Story	
Interaction	
Fun	
Intervace	

<b>TOTAL</b>	
<i>Vote from 0 to 5 for each category</i>	

Table 1. Peer evaluation

The parameters that the students will need to evaluate are as follows:

- a) Story. Rate the quality of the plot based on the originality and quality of the proposed argument.
- b) Interaction. Evaluate whether the reader has a determinant role in the story. An adventure in which you only have to select one option has less interaction compared to one that offers a wide variety of decision-making.
- c) Enjoyment. Judge based on the student's experience and entertainment while playing.
- d) Interface. Evaluate the quality of images/illustrations that accompany the text, if applicable. If no decorative elements are included, the criterion can be skipped.

Once the teacher has collected all the completed evaluation forms, the total points will be added up, and the best gamebook and the students who created it will be determined, thus concluding the proposal for the students.

#### 4.2.3 Evaluation

Due to the importance, duration, and difficulty of the didactic proposal, as well as the effort required in both written expression and comprehension, we consider that this activity should be formally evaluated and could even be included as a summative assessment. In our proposal, through a rubric (Table 2), partially adapted from the DELE B2 level grading descriptors of the Cervantes Institute, all aspects are assessed, with a focus on grammatical accuracy, lexical use, and text cohesion, prioritized over elements like originality or narrative interest.

The rubric is divided into three parts, from most to least important. In the first part, aspects related to written expression are evaluated. The content of the descriptors should be adjusted based on the aspects targeted at the beginning of the activity. In the second part, we evaluate the content, considering the originality of the plot, its appropriateness to the proposed theme and genre, and the reader's interaction with the constructed story. It is also advisable to include a section to assess the visual aspect, in case multimedia elements like images accompany and illustrate the

plot. Additionally, a descriptor for assessing class participation during the various sessions can be included. Finally, to provide more significance to the self-assessment done by the students, the final grade could be slightly increased—up to one point at most—if the interactive book has been particularly well-received by their peers.

TITLE: Student/s:					
		2	1,5	1	0,5
Evaluation of written expression	Grammatical correction	Grammatical correction is nearly complete and corresponds to the expected level of the students. The use of narration in the second person is correct. There are small and sporadic errors that do not hinder comprehension.	There are some errors present, but they do not overly hinder the understanding of the text. The use of the second person for narrating the story is mostly followed.	At times, the errors hinder the understanding of the text. There are errors in constructing basic sentences. The use of the second person in narration is not consistent.	The errors are abundant and complicate the understanding of the text. Numerous errors in verb conjugation are present. The text is not narrated correctly in the second person.
	Lexicon	The use of vocabulary is optimal, adapting to the situation and employing synonyms and expressions. There is a significant and varied presence of vocabulary and expressions related to emotions and feelings.	A proper command of vocabulary is demonstrated, although somewhat basic and repetitive.	The use of relevant vocabulary for the activity is correct, but a lack of variety in the repertoire is evident.	The vocabulary included in the text is insufficient for B2 level standards.
	Coherence and cohesion	The text presents an optimal external structure, with a coherent division into paragraphs. At an internal level, ideas are also divided, and the use of a	The external structure of the text is correct, and at an internal level, there is a good command of discourse markers and connectors, although a bit	Despite the presence of connectors, there is a lack of variety, and the text is not always organized coherently.	The paragraph division in the text lacks logic, and connectors or discourse markers are either absent or too basic.

		good repertoire of connectors helps the reading to flow smoothly.	more variety is needed.		
Content	Originality		The text is original and proposes interesting and unexpected plotlines that invite further reading.	The plot of the text, while predictable, is interesting and invites the reader to continue.	The plot of the text is predictable and doesn't strongly engage the reader.
	Relevance to the topic		The student fully adheres to the proposed theme from the beginning.	The student partially adheres to the proposed theme from the beginning.	The student barely addresses or completely ignores the proposed theme.
	Interaction		The moments in which the reader interacts with the story are varied and plentiful. The feeling of being important in the development of the events is constant.	The interaction proposed to the reader is correct. There is a variety of decisions, and they are relevant.	There is little interaction proposed to the reader, and what is present is inconsequential for advancing the plot.
Other aspects	Multimedia content			There is a good use of images and multimedia elements that accompany the text. The images are original and even have significance in the narration.	The images are chosen without much criteria or are merely aesthetic accompaniments. They don't influence the reading experience.
	Work in class			The students have worked well in class, showing interest and actively participating.	The students have shown little to no interest in the activity. Their work in class is poor and can be improved.
<p>Total score: /12</p> <p>It's possible to increase the grade by up to a maximum of 1 point if peer evaluations have been very positive.</p>					

Table 2: Evaluation rubric.

## Conclusions

With the advent of new technologies and their implementation in the classroom, it is only a matter of time before video games, one of the most powerful industries in today's society, also make their presence felt and establish themselves as yet another tool at the disposal of educators. The video game, understood as the most contemporary version of the classic game, holds great significance when introduced in the classroom due to its capacity to enhance motivation. By devising an activity that presents challenges to test students' abilities, a set of rules they must adhere to, and, above all, offers positive feedback in the form of points, leaderboards, or even rewards, students are stimulated, thus facilitating the acquisition of a foreign language.

At the outset of this article, the hypothesis that video games could be a useful tool in ELE classes was posited. Through the theoretical framework and the didactic proposal, an attempt has been made to demonstrate the validity of this hypothesis, and the outcome is affirmative, albeit with significant nuances. Video games can indeed be valuable in the classroom, yet their current integration seems to predominantly take the form of Serious Games. In other words, there is a wide variety of video games specifically designed for education, but they may not be adaptable to the specific needs of educators and can be played independently outside the classroom. Nonetheless, didactic proposals focused on gamifying content through video games are scarce, except for those employing applications like *Kahoot*.

Gamifying content through video games without resorting to specific applications is an incredibly complex task, as it requires either programming knowledge or a highly creative use of programs whose primary function is not gaming. Furthermore, in most cases, basic gamification methods, such as awarding points, providing rewards, or crafting stories around the content, are easier to implement without the need for new technologies. This doesn't mean that creating our own gamified activities is impossible, and the didactic proposal of the gamebook serves as an example. It is a straightforward activity that holds many possibilities and has yielded positive results in my classes, but its limitations are evident. The most obvious limitation is that it is a gamebook which, although considered a video game, offers minimal reader/player interaction. It would also be futile to deny that its interface leaves much to be desired, especially when compared to applications specifically developed for gamification, such as *Kahoot* or *Minecraft*.

In summary, gamification using video games is possible, and everything indicates that it will increasingly be present in classrooms. However, it's likely to be based on the development of

applications similar to *Kahoot* or *Minecraft*, which provide software that educators can customize to create various activities for their lessons, with varying degrees of freedom. This is in contrast to a form of gamification unique to each teacher, given the challenges associated with developing new content for digital platforms.

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